

**FINAL EXPRESS TERMS OF PROPOSED ACTION
OCTOBER 2, 2001**

LEGEND - EXAMPLES

PROPOSED CHANGES

NEW or AMENDED TEXT = SINGLE UNDERLINE = extinguishers

DELETION of TEXT = SINGLE STRIKETHROUGH = ~~extinguishers~~

EXPRESS TERMS OF PROPOSED ACTION

Title 19, Division 1, Chapter 3

Article 1. Administration

550. Authority. Chapter 3, ~~of Chapter 1, Division 1~~ of Title 19 of the California Code of Regulations is adopted by the State Fire Marshal under the authority of Division 12, Part 2, Chapter 1.5, Section 13160, et seq., of the Health and Safety Code of the State of California.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160-13169, Health and Safety Code.

550.1. Title. These regulations and standards shall be known as the "Regulations and Standards of the State Fire Marshal," may be cited as such, and will be hereinafter referred to as "these regulations."

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160-13169, Health and Safety Code.

550.2. Purpose. The purpose of these regulations and standards is to provide means to register persons who service portable fire extinguishers; to license concerns engaged in the business of servicing portable fire extinguishers; to license private and public entities not engaged in the business and their designated employees who service their own portable fire extinguishers; and to regulate the care, maintenance, placement, frequency of servicing, charging and testing of portable fire extinguishers.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13163, and 13175, Health and Safety Code.

550.3. Scope. These regulations apply to the sale and servicing of all portable fire extinguishers as outlined in Sections 13160, 13162, 13175, 13183, 13190.1, 13190.2 13190.3, Health and Safety Code.

EXCEPTIONS: These regulations do not apply to nor control the servicing of:

- (a) Permanently installed automatic fire extinguishing systems or portions thereof;
- (b) Owner serviced portable fire extinguishers as provided in Section 13175.1, Health and Safety Code, and;
- (c) Portable fire extinguishers owned and serviced by the Federal Government.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13161, 13162, 13163, 13165, 13183, 13190, 13190.2, 13190.3, Health and Safety Code.

550.4. Notices. Any notice by the State Fire Marshal and required by any provisions of the statutes or of these regulations, may be given by certified or registered mail, postage prepaid, addressed to the person to be notified, at his or her last known address of residence or business as it appears on the records in the Office of the State Fire Marshal.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160-13169, Health and Safety Code.

550.5. Validity.

(a) If any article, section, subsection, sentence, clause, or phrase of these regulations is for any reason held to be unconstitutional, contrary to statute or exceeding the authority of the State Fire Marshal, such decision shall not affect the validity of the remaining portion of these regulations.

(b) If any article, section, subsection, sentence, clause or phrase of these regulations is for any reason held to be inoperative as it applied to any person or circumstance, such decision shall not affect its validity as it applied to any other person or circumstance.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160-13169, Health and Safety Code.

550.6. Approval of Laboratories.

(a) Any laboratory desiring approval by the State Fire Marshal to perform testing and labeling of portable fire extinguishers shall submit proof of the following:

(1) The Laboratory possesses proper equipment necessary to perform tests according to the ANSI/UL standards listed in Section 561.2.

(2) Evidence of qualified personnel, meaning the employment of not less than one person who holds a degree in engineering or is registered as a Professional Engineer, and having not less than two years actual experience testing portable fire extinguishers in accordance with ANSI/UL Test standards in Section 561.2.

(b) Laboratory personnel performing tests and not meeting the above requirements may perform such tests only under the direct supervision of a qualified person.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13162, Health and Safety Code.

550.7. Standards for Fire Safety. The phrase "Standards for Fire Safety" means compliance with Standards listed in Section 561.2(a).

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13161, 13162, 13190.1, 13190.3, Health and Safety Code.

Article 2. Definitions.

557. Definitions. For the purpose of this chapter, the meaning of the following terms, shall be as set forth in this Article.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160-13190.4, Health and Safety Code.

557.1 "A" Definitions.

- (a) AFFF. Aqueous Film Forming Foam.
- (b) ANSI. American National Standards Institute, Inc.
- (c) Approved. Refers to approval by the State Fire Marshal as a result of investigations or tests conducted or supervised by him, or by reason of tests by recognized testing laboratories, national authorities, technical or scientific organizations.
- (d) Annual Service Maintenance. The period of service maintenance for portable fire extinguishers starting on the day of first service maintenance and ending one calendar year later. The type of fire extinguisher maintenance that is required to be performed annually, pursuant to Section 575.1. For annual maintenance, the year shall start on the first day maintenance is performed and end one calendar year later.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13166, 13172, 13174, 13179, 13189, Health and Safety Code.

557.2 "B" Definitions. None.

557.3 "C" Definitions.

- (a) Capacity. The amount of extinguishing agent contained in any portable fire extinguisher as measured in U.S. gallons, pounds or S.I. units (See Section 557.19).
- (b) Cartridge Operated Fire Extinguishers. Extinguishers in which expellant gas is stored in a separate cartridge or in a gas cylinder located within or adjacent to the shell containing the extinguishing agent. These extinguishers are actuated by releasing the cartridge gas which expels the agent.
- (c) Certificate of Registration. A document issued by the State Fire Marshal to any qualified person authorizing that person to perform any specific act.
- (d) Charge. Any substance or compound of substances used as an extinguishing agent, or as an expellant force for an extinguishing agent.
- (e) Charging. The act of placing any "charge" within any portable fire extinguisher.
- (f) Chemical. Any substance or compound of substances used as an extinguishing agent or as an expellant force for an extinguishing agent.
- (g) Classes of fire:
 - (1) CLASS A. Fires in ordinary combustible materials such as wood, cloth, paper, rubber, and many plastics.
 - (2) CLASS B. Fires in flammable or combustible liquids, such as oils, greases, tars, oil base paints, lacquers, and flammable gases.
 - (3) CLASS C. Fires involving energized electrical equipment when electrical non-conductivity of the extinguishing media is of importance.
 - (4) CLASS D. Fires in combustible metals, such as magnesium, titanium, sodium, lithium, and potassium.
 - (5) CLASS K. Fires in cooking appliances that involve combustible cooking media (vegetable or animal oils and fats).
- (h) Compressed Gas Cylinders. Compressed gas cylinders and cartridges are those containing any material or mixture having an absolute pressure exceeding 40 p.s.i. at 70 degrees Fahrenheit.
- (i) Cylinder, D.O.T.. Compressed gas cylinders and cartridges manufactured to D.O.T. standards which are either:
 - (1) High pressure - Service pressure of 501 p.s.i.g. or higher at 70 degrees Fahrenheit and all cylinders containing carbon dioxide, and
 - (2) Low pressure - Service pressure of 500 p.s.i.g. at 70 degrees Fahrenheit or lower.
- (j) Cylinder, Non-D.O.T.. Low pressure containers typically used for cylinder operated dry chemical, and pressurized water-based type extinguishers.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13163-13164, 13174-13182, 13184-13186, 13188-13189, Health and Safety Code.

557.4. "D" Definitions.

(a) D.O.T.. United States Department of Transportation, which has jurisdiction over compressed gas cylinders and cartridges.

~~(b) Disposable Fire Extinguishers. A disposable, non-rechargeable, non-refillable fire extinguisher not capable (nor intended) of undergoing complete maintenance, hydrostatic testing, and being restored to its fully operating capability by the standard practices used by fire equipment dealers and distributors.~~

~~(e)~~ (b) Dry Chemical Closed Recovery System. A system that provides for the transfer of dry chemical agent between extinguishers and recovery containers that is closed to prevent the loss of agent to the atmosphere.

~~(c) Dry Powder. Solid materials in powder or granular form designed to extinguish Class D combustible metal fires by crusting, smothering, or heat transferring means.~~

~~(d) Dry Chemical. Various mixtures of finely divided solid particles additionally supplemented with special treatments to provide resistance to packing, moisture absorption (caking), and proper flow characteristics. These agents are designed for extinguishment of Class "A" and "B" fires. They are nonconductors and approved for use on energized Class C fire situations.~~

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, Health and Safety Code.

557.5. "E" Definitions.

(a) "E" Number. Fire Extinguisher Concern License Number designated by the Office of the State Fire Marshal.

(b) "EE" Number. Certification of Registration Number designated by the Office of the State Fire Marshal to individuals qualified to perform specific acts of servicing fire extinguishers.

~~(a)~~ (c) Effectiveness. Having the ability to produce the desired extinguishing potential.

~~(b)~~ (d) Employee. Those persons who work directly for a licensed concern in the business of servicing portable fire extinguishers for a fee or are employed by and work directly for a public or private company not engaged in the business who service their own portable fire extinguishers. ~~including but not limited to those persons who work on a contractual basis with a licensee using service tags of said licensed concern.~~

~~(e)~~ (e) Empty. To completely remove all contents from a portable fire extinguisher except the expellant cartridge.

~~(d)~~ (f) Extinguisher. See Section 557.16(c), Portable Fire Extinguisher.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160-13164, 13170, 13174-13177, 13183, 13189, 13190.1, 13190.3, Health and Safety Code.

557.6. "F" Definitions.

(a) Factory Test Pressure. The pressure at which the shell was tested at time of manufacture. This pressure is shown on the nameplate.

(b) FFFP. Film Forming Fluoroprotein Foam.

(c) F.M.. Factory Mutual.

(d) Fire Department. For the purposes of these regulations, a department of state, county, districts, or municipal government, a separate tax-supported unit of government organized under special provisions of law or a privately organized unit located within an industrial facility providing fire protection service to the community or facility to prevent loss of life and property when fire starts, confine fire to the place where it starts, and to extinguish fires.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections, 13160-13165, 13167-13169, 13172-13175, 13176-13178, 13180-13190.2, 13190.4, Health and Safety Code.

557.7. "G" Definitions.

- (a) Gallon. U.S. Standard gallon. or S.I. Units (See Section 557.19).
- (b) Gauge. U.S. Standard gauge. or S.I. Units (See Section 557.19).

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections, 13160, 13162, Health and Safety Code.

557.8. "H" Definitions.

~~(a) Halogenated Agent. Halogenated extinguishing agents are hydrocarbons in which one or more hydrogen atoms have been replaced by atoms from the halogen series: fluorine, chlorine, bromine, or iodine. This substitution confers not only nonflammability, but flame extinguishment properties of many of the resulting compounds.~~

(a) Halogenated Agents. Halogenated (clean) agents referenced in these regulations are of the following types:

(1) Halons. Halons include Bromochlorodifluoromethane (Halon 1211), bromotrifluoromethane (Halon 1301), and mixtures of Halon 1211 and Halon 1301 (Halon 1211/1301).

(2) Halocarbons. Halocarbon agents include hydrochlorofluorocarbon (HCFC), hydrofluorocarbon (HFC), perfluorocarbon (PFC), and fluoroiodocarbon (FIC) types of agents.

~~(a)~~ (b) Halon Closed Recovery System. A system that provides for the transfer of halon between extinguishers, supply containers, and recharge and recovery containers in compliance with U.L. Standard 2006.

~~(b)~~ (c) Hydrostatic Test. Any pressure test procedure specified in this chapter.

~~(e)~~ (d) High Pressure Cylinder. High pressure cylinders and cartridges are those containing nitrogen or compressed air at service pressure higher than 500 p.s.i.g. at 70 degrees Fahrenheit, or carbon dioxide.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, Health and Safety Code.

557.9. "I" Definitions.

~~(a) Inspect. An external visual examination of any portable fire extinguisher to determine if it is in its proper place, that it has not been tampered with, and that there is no physical damage or a condition that might prevent operation.~~

(a) Inspection. A "quick check" that a fire extinguisher is available and will operate. It is intended to give reasonable assurance that the fire extinguisher is fully charged and operable. This is done by verifying that the fire extinguisher is in its designated place, that it has not been actuated or tampered with, and that there is no obvious or physical damage or condition to prevent its operation.

~~(b) Internal Maintenance Tag – An adhesively applied tag.~~

(b) Internal Maintenance Tag – An SFM approved self-adhesive tag conforming to Section 596 and 592.2, Title 19.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13164, 13173, Health and Safety Code.

557.10. "J" Definitions. None.

557.11. "K" Definitions. None

557.12. "L" Definitions.

~~(a) Label. A tag, plate or band with legible information or symbols in accordance with the standards of Section 561.2 attached to a fire extinguisher cylinder, shell or shroud by the manufacturer.~~

(a) License. A document issued by the State Fire Marshal authorizing a concern at a fixed location to engage in the business of servicing, or hydrostatic testing of any portable fire extinguisher servicing fire extinguishers, or a public or private entity not engaged in the business of servicing fire extinguishers, to servicing, or hydrostatic testing of any portable fire extinguisher perform specific acts of servicing portable fire extinguishers (as specified in section 595.5).

~~(b) Licensee. A specific concern~~ or a public or private entity to which a license has been issued by the State Fire Marshal.

~~(c) Listed. Equipment or materials included in a list published by a State Fire Marshal approved laboratory having a third party certification program for portable fire extinguishers which meets or exceeds ANSI/UL 1803, Standard for Factory Follow-up on Third Party Certified Portable Fire Extinguishers, 1st Edition, as determined by the State Fire Marshal.~~

(d) Listed Label. A tag, plate or band with legible information or symbols in accordance with the standards of Section 561.2 attached to a fire extinguisher cylinder, shell or shroud by the manufacturer.

(e) Loaded Stream Charge. A water-based extinguishing medium that uses an alkali metal salt as a freezing point depressant.

~~(f) Low Pressure Cylinder. Low pressure cylinders are those containing fire-extinguishing agent (medium), nitrogen, compressed air, or other compressed gases, and/or halon at a service pressure of 500 p.s.i.g. (3447 kPa) or lower at 70 degrees Fahrenheit (21°C). The cylinders may also contain non-corrosive, non-pressure generating dry materials such as dry chemical or dry powder agents or water based agents in cylinders protected against internal corrosion.~~

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13163-13169, 13171-13174, 13185, 13188-13190, Health and Safety Code.

557.13. "M" Definitions.

(a) Maintenance. A "thorough check" thorough examination of the fire extinguisher done in accordance with the manufacturer's written instructions and the requirements of these regulations this chapter. It is intended to give maximum assurance that a fire extinguisher will operate effectively and safely. Maintenance includes a thorough examination and any necessary repair, or replacement. Maintenance will normally reveal if hydrostatic testing or internal maintenance is required.

- (b) Marketing. The act of selling. (See Section 557.19.(a))
- (c) Mild Steel Shell. Except for stainless steel and steel used for high pressure cylinders, all other steel shells are defined as "mild steel" shells.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, Health and Safety Code.

557.14. "N" Definitions.

- (a) N.F.P.A. - The National Fire Protection Association.
- (b) Nonrechargeable Fire Extinguisher. A nonrechargeable (nonrefillable) fire extinguisher is not capable of (nor intended to be capable of) undergoing complete maintenance, hydrostatic testing, and being restored to its full operating capability by the standard practices used by fire equipment dealers and distributors. Some fire extinguishers that are physically rechargeable are marked nonrechargeable and are therefore considered by for purpose of this regulation to be nonrechargeable (nonrefillable) fire extinguishers.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

557.15. "O" Definitions. None.

557.16. "P" Definitions.

- (a) Part. Any component of a portable fire extinguisher except the extinguishing agent and charge.
- (b) Part (Approved). Parts used in the maintenance and servicing of portable fire extinguishers shall be the manufacturer's recommended replacement parts or parts of equal quality. Part, as used in this subchapter, does not include the extinguishing agent itself or the expellant in the extinguisher.
- (c) ~~Portable Fire Extinguisher. A manually actuated portable device containing extinguishing agent powder, liquid, or gases which can be expelled under pressure for the purpose of suppressing or extinguishing a fire, and may include a self-contained automatic extinguisher unit that has no manual means of actuation and discharges extinguishing agent by thermal actuation.~~ A manually actuated portable device carried, or mounted on wheels and operated by hand containing and which contains a fire extinguishing agent that can be expelled under any type of pressure for the purpose of suppressing or extinguishing fire.
- (d) Pressurized Extinguisher. A portable fire extinguisher, which maintains the expellant force and the extinguishing agent within the same common cylinder.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160-13164, 13170, 13174-13177, 13183, 13190.1-13190.3, Health and Safety Code.

557.17. "Q" Definitions. None.

557.18. "R" Definitions.

(a) Rating. A numerical-alphabetical designation of a portable fire extinguisher which indicates the extinguisher potential (the number) and the class of fire (the letter) for which the extinguisher is suitable.

~~EXCEPTION: Self-contained automatic extinguisher units shall be rated in accordance with the provisions of UL 1058, Standard for Halogenated Agent Extinguishing System Units, 2ed Edition.~~

(b) Recognized Testing Laboratory. For the purpose of this article, a recognized testing laboratory shall mean any agency staffed by qualified personnel and properly equipped to conduct the particular test in question, and who are regularly engaged in conducting tests. Laboratories other than those specified in Section 13162(b) of the Health and Safety Code, shall be approved by the State Fire Marshal.

~~(c) Recharge. To fill an extinguisher with a charge the second and all succeeding times.~~

(c) Rechargeable (Refillable) Fire Extinguisher. A rechargeable (refillable) fire extinguisher is capable of undergoing complete maintenance, including internal inspection of the pressure vessel, replacement of all sub-standard parts and seals, and hydrostatic testing. The fire extinguisher is capable of being recharged with agent and restored to its full operating capability by the standard practices used by licensed concerns. Rechargeable (refillable) fire extinguishers shall be marked "Recharge Immediately After Any Use" or with a similar equivalent marking.

(d) Recharging. The replacement of the extinguishing agent, also including the expellant for certain types of extinguishers.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13162, 13189, Health and Safety Code.

557.19. "S" Definitions.

(a) Sell. Offer or expose for sale, barter, trade, deliver, give away, rent, consign, lease, market, distribute or possess with the intent to sell.

(b) ~~Service~~ Servicing. Includes one or more of the following:

- (1) maintenance;
- (2) recharging; ~~and~~
- (3) hydrostatic testing.

(c) Service Pressure. The normal operating pressures as indicated on the gauge or nameplate.

(d) Signature. The written ~~signature name~~ of a person as it appears on the Application for Certificate of Registration ~~signature card submitted with application~~. A rubber stamp of name or signature is not acceptable.

(e) S.I. Units. Metric units of measure in accordance with the International System of Units.

(f) Shall. Indicates a mandatory requirement.

(g) Should. Indicates a recommendation or that which is advised but not required.

(h) Stored Pressure Fire Extinguisher. A fire extinguisher in which both the extinguishing material and expellant gas are kept in a single container and that includes a pressure indicator or gauge.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, Health and Safety Code.

557.20. "T" Definitions. ~~None.~~

(a) Travel Distance. The actual walking distance from any point to the nearest fire extinguisher fulfilling "fire extinguisher hazard requirements".

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13162, Health and Safety Code.

557.21. "U" Definitions.

(a) U.L. ~~Inc.~~ Underwriters' Laboratories, Incorporated.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13162, Health and Safety Code.

557.22. "V" Definitions.

(a) Valid. Means a license or Certificate of Registration which has not been suspended, denied, or revoked and for which all appropriate fees have been tendered for the period involved.

(b) Vaporizing liquid. A class of extinguishing agents possessing toxic properties which are prohibited for use in California. (Section 13162(c), Health and Safety Code). These agents are Carbon Tetrachloride (CCl₄), Methyl Bromide (~~CBr~~), (CH₃Br), Chlorobromomethane (CH₂ClBr), and Dibromo Tetrafluoroethane (~~CBr₂F₄~~) (C₂Br₂F₄) ~~is also specifically prohibited.~~

(c) Vehicle. For the purposes of this Chapter, as defined in Vehicle Code Section 670, vessels as defined in Harbors and Navigation Code Section 651, and aircraft as defined in Public Utilities Code Section 21012.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, Health and Safety Code.

557.23. "W" Definitions.

(a) Water-Type Fire Extinguisher. A water-type fire extinguisher contains water-based agents, such as water, AFFF, FFFP, antifreeze, and loaded stream.

(b) Wet Chemical. Wet chemicals include, but are not limited to, aqueous solutions of potassium acetate, potassium carbonate, potassium citrate, or combinations of these materials.

~~(b)~~ (c) Wheeled Fire Extinguisher. For the purpose of this chapter, wheeled fire extinguishers are considered portable fire extinguishers as defined in Section 557.16(c).

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

557.24. "X" Definitions. None.

557.25. "Y" Definitions. None.

557.26. "Z" Definitions. None.

Article 3. General Provisions

560. General Provisions and Fee Schedule

(a) No person shall engage in the servicing and maintenance of portable fire extinguishers under the scope of this chapter (Section 550.3) without having first submitted an application and all documents necessary to demonstrate compliance with and having obtained a license from, the State Fire Marshal in accordance with the provisions of this chapter. Licenses shall be processed in accordance with Title 19, California Code of Regulations, Section 3.33.

(b) Every fire extinguisher concern license or certificate of registration fee required in accordance with the provisions of Section 13189 of the Health and Safety code shall be paid in legal tender, by money order, postal note, or valid personal check, made payable to the "State Fire Marshal". Fees shall accompany each ~~separate~~ application for license or certificate of registration.

(c) Every fee shall be paid, at or mailed to, the Sacramento Headquarters Office of the State Fire Marshal.

(d) The original and annual renewal fee for any license or a certificate of registration issued pursuant to this chapter shall be as follows:

(1) Certificate of Registration..... \$55

~~(1) A license to service, recharge or inspect all types of fire extinguishers except halon, dry chemical and dry powder extinguishers..... \$125~~

~~(2) A license to conduct hydrostatic tests of low pressure water and water chemical fire extinguishers..... \$125~~

~~(3) A license to service, recharge, inspect, or conduct hydrostatic tests of low pressure dry powder and dry chemical fire extinguishers..... \$125~~

~~(4) A license to conduct hydrostatic expansion tests of high pressure fire extinguishers cylinders that are listed and marked in conformance with the United States Department of Transportation (D.O.T.) Regulations..... \$125~~

~~(5) A license to service, hydrostatically test, and recharge halon fire extinguishers..... \$125~~

(2) A fire extinguisher Concern license for firms engaged in the business of performing for a fee specific acts of servicing portable fire extinguishers pursuant to 595.5..... \$625

(3) A "L" (Limited) fire extinguisher servicing license for public or private entities not engaged in the business, nor performing for a fee, specific acts pursuant to Section 595.5 (a)(7) of servicing their own portable fire extinguishers..... \$125

(e) Application for renewal ~~of any class~~ of a license or for a certificate of registration which has expired for one year shall be considered as an original application.

(f) Application for change of location of a licensed concern..... \$125

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

560.1. Report of Violations. Any action taken by a local entity against licensed concerns or Certificate of Registration holders shall be reported to the State Fire Marshal within 15 days of the action. The State Fire Marshal shall respond to the reporting agency within 60 days.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

560.2. Deceptive Practices.

(a) Any licensee, or employee thereof, who engages in unfair methods of competition or makes false or misleading statements as prohibited in Sections 17200 and 17500 of the Business and Professions Code shall be subject to license denial, revocation or suspension.

(b) Any licensee, or employee thereof, upon making contact with the prospective buyer (business owner or owner's representative) shall:

- (1) state the identity of the person making the solicitation
- (2) state the name of the business being represented
- (3) state the type of goods or services being offered for sale
- (4) show or display personal identification from the fire extinguisher concern affiliated with.
- (5) show current Certificate of Registration Card prior to performing fire extinguisher servicing.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13170, 13171, 13183, 13185, 13188, Health and Safety Code.

560.3. Employer Responsibility. Every licensed concern is responsible for the acts of employees (see definition of "Employee" Section 557.5(d) in the marketing, sale, distribution, and servicing of any portable fire extinguisher.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13165, Health and Safety Code.

560.4. Recall of Extinguishers. When a manufacturer deems it necessary to recall an extinguisher model or series, the manufacturer shall notify the State Fire Marshal. Such notification shall include the reasons for the recall and procedures for replacement and the disposition of recalled extinguishers.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, 13177, Health and Safety Code.

~~560.5. Condemned Extinguishers.~~

~~(a) Portable fire extinguishers shall not be repaired except as permitted by manufactures instructions or converted from one type of class to another type or class of extinguisher.~~

~~(b) Portable fire extinguishers which have been repaired, converted, altered or found to have conditions outlined in Section 575.2.(c) are prohibited from use as portable fire extinguishers. Such extinguishers shall be removed from service and tagged with a red tag bearing the term "Condemned" on each face.~~

~~EXCEPTION: The exchange of defective or broken parts with approved parts as defined in Section 557.16(b) or equipment or materials listed as defined in Section 557.12(d) shall not be construed as "repair".~~

~~(e) Condemned portable fire extinguishers shall be destroyed by the owner or at the owner's direction.~~

~~Authority: Health and Safety Code Section 13160~~

~~Reference: Health and Safety Code Sections 13160, 13162, 13177~~

~~**560.6. Temperature Extremes.** Installations of portable fire extinguishers in areas subject to temperature extremes shall conform to Section 563.10.~~

~~Authority: Health and Safety Code Section 13160~~

~~Reference: Health and Safety Code Sections 13160, 13177~~

Article 4. Classification, and Ratings and Placement of Portable Fire Extinguishers

561. Classification.

(a) Portable fire extinguishers are classified for use on certain classes of fire and rated for relative extinguishing effectiveness at a temperature of plus 70°F (21.1°C) by testing laboratories. This is based upon classification of the fire pursuant to Section 561.1 and the fire extinguishment potentials as determined by fire tests.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

561.1. Classification and Rating System.

(a) The classification and rating system described in these regulations is that of ANSI/UL Standard 711, and is based on extinguishing preplanned fires of the determined size and description as follows:

- (1) CLASS A RATING. Wood and excelsior.
- (2) CLASS B RATING. Two-inch (5.1-cm) depth n-heptane fires in square pans.
- (3) CLASS C RATING. No fire test. Agent must be a nonconductor of electricity.
- (4) CLASS D RATING. Special tests on specific combustible metal fires.
- (5) CLASS K RATING. Special tests on cooking appliances using combustible cooking media (vegetable or animal oils and fats).

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

561.2. Fire Test and Performance Standards.

(a) Portable fire extinguishers used to comply with this regulation shall be listed and labeled and meet or exceed all of the requirements of the fire test standards and one of the appropriate performance standards shown below ~~(most recent editions):~~

(1) Fire Test Standards: ANSI/UL 711, Standard for Fire Extinguishers, Rating and Fire Testing of, ~~4th Edition~~ 5th Edition, 1995.

(2) Performance Standards:

(A) CO2 Types: ANSI/UL 154, Standard for Carbon Dioxide Fire Extinguishers, ~~7th Edition.~~ 8th Edition, 1995.

(B) Dry Chemical Types: ANSI/UL 299, Standard for Dry Chemical Fire Extinguishers, ~~8th Edition.~~ 9th Edition, 1995.

(C) Water Types: ANSI/UL 626, Standard for Two and One-Half Gallon Stored-Pressure, Water-Type Fire Extinguishers, ~~6th Edition.~~ 9th Edition, 1995.

(D) Halon Types: ANSI/UL 1093, Standard for Halogenated Agent Fire Extinguishers, ~~4th Edition.~~ 5th Edition, 1995.

(E) Foam Types: ANSI/UL 8, Standard for Foam Fire Extinguishers, ~~4th Edition.~~ 5th Edition, 1995.

(b) The identification of the listing and labeling organization, the fire test and performance standard which the extinguisher meets or exceeds shall be clearly marked on each extinguisher.

EXCEPTION: Extinguishers manufactured prior to January 1, 1986.

(c) An organization listing, labeling and marking extinguishers used to comply with the requirements of this subchapter shall utilize a third party certification program for portable fire extinguishers which meets or exceeds ANSI/UL 1083.

EXCEPTION: Extinguishers manufactured prior to January 1, 1989.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~562.~~—Classification of Hazards.

(a) ~~Light (low) Hazard. Locations where the total amount of Class A combustible materials, including furnishings, decorations and contents, is of minor quantity. These shall include buildings or rooms occupied as offices, classrooms, churches, assembly halls, etc. This classification anticipates that the majority of contents are either noncombustible or so arranged that a fire is not likely to spread rapidly. Small amounts of Class B flammables used for duplicating machines, art departments, etc., are included provided that they are kept in closed containers and safely stored.~~

(b) ~~Ordinary (Moderate) Hazard. Locations where the total amount of Class A combustibles and Class B flammables are present in greater amounts than expected under Light (Low) Hazard occupancies. These occupancies could consist of offices, classrooms, mercantile shops and allied storage, light manufacturing, research operations, auto showrooms, parking garages, workshop or support service areas of Light (Low) Hazard occupancies, and warehouses containing Class I or Class II commodities.~~

(c) ~~Extra (High) Hazard. Locations where the total amount of Class A combustibles and Class B flammables are present, in storage, production use, and/or finished product over and above those expected and classed as ordinary (moderate) hazards. These occupancies could consist of woodworking, vehicle repair, aircraft and boat servicing, individual product display showrooms, product convention center displays, storage and manufacturing processes such as painting, dipping, coating, including flammable liquid handling. Also included is warehousing of, or in-process storage of other Class I and Class II commodities.~~

Authority: ~~Health and Safety Code Section 13160~~

Reference: ~~Health and Safety Code Section 13160~~

~~563.~~ 562. Classification and Rating Marking. The classification of extinguishers shall consist of a LETTER which indicates the class of fire(s) on which an extinguisher has been found to be effective, preceded by a rating ~~NUMERAL~~ NUMBER (Class A and B only) which indicates the relative extinguishing effectiveness.

EXCEPTION: Extinguishers classified for use on Class C ~~or Class D, or Class K~~ hazards shall not be required to have a ~~numeral~~ number preceding the classification letter.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

563.1. ~~Operating Condition.~~ ~~Portable extinguishers shall be maintained in a fully charged and operable condition, and kept in their designated places at all times when they are not being used.~~

Authority: ~~Health and Safety Code Section 13160~~

Reference: ~~Health and Safety Code Section 13160~~

563.2. ~~Accessibility and Availability.~~

~~(a) Extinguishers shall be conspicuously located where they will be readily accessible and immediately available in the event of fire. They shall be located along normal paths of travel, including exits from an area.~~

Authority: ~~Health and Safety Code Section 13160~~

Reference: ~~Health and Safety Code Section 13160~~

563.3. ~~Cabinets.~~ ~~Cabinets housing extinguishers shall not be locked.~~

~~EXCEPTION: Where extinguishers are subject to malicious use, locked cabinets may be used provided they include means of emergency access and are approved by the authority having jurisdiction.~~

Authority: ~~Health and Safety Code Section 13160~~

Reference: ~~Health and Safety Code Section 13160~~

563.4 ~~Installation.~~ ~~Extinguishers shall be installed on the hangers, brackets or in cabinets unless the extinguishers are of the wheeled type.~~

Authority: ~~Health and Safety Code Section 13160~~

Reference: ~~Health and Safety Code Section 13160~~

563.5. ~~Brackets.~~ ~~Extinguishers installed under conditions where they are subject to being dislodged shall be installed in brackets specifically designed to cope with this problem.~~

Authority: ~~Health and Safety Code Section 13160~~

Reference: ~~Health and Safety Code Section 13160~~

563.6. ~~Physical Damage Protection.~~ ~~Extinguishers installed under conditions where they are subject to physical damage shall be protected from impact.~~

Authority: ~~Health and Safety Code Section 13160~~

Reference: ~~Health and Safety Code Section 13160~~

563.7. ~~Mounting.~~ ~~Extinguishers having a gross weight not exceeding 40 lbs (18.14kg) shall be installed so that the top of the extinguisher is not more than 5 ft. (1.53m) above the floor. Extinguishers having a gross weight greater than 40 lbs (18.14kg) (except wheeled types) shall be so installed that the top of the extinguisher is not more than 3-1/2 ft. (1.07 m) above the floor. In no case shall the clearance between the bottom of the extinguisher and the floor be less than 4 in. (102 mm).~~

Authority: — Health and Safety Code Section 13160
Reference: — Health and Safety Code Section 13160

563.8. 563. Operating Instructions.

(a) Extinguisher operating instructions shall be located on the front of the extinguisher and be clearly visible. Other labels and markings shall not be located or placed on the front of the extinguisher.

EXCEPTION: Labels that specifically relate to operation, classification or warning information. Original manufacturer's labels, labels that specifically relate to the extinguisher's operation or fire classification, or inventory control labels specific to that extinguisher. These labels shall not contain any company advertising.

(b) Extinguishers mounted in cabinets or wall recesses shall be placed in a manner such that the extinguisher operating instructions face outward. The location of such extinguishers shall be marked conspicuously.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

563.9. Sealed Cabinets. ~~Where extinguishers are installed in sealed cabinets which are exposed to elevated temperatures above 120°F (49°C), cabinets shall be provided with ventilation openings and drains.~~

Authority: — Health and Safety Code Section 13160
Reference: — Health and Safety Code Section 13160

563.10. Installation Temperatures. ~~Water-type (water, AFFF, FFFP) extinguishers shall not be installed in areas where temperatures are outside the range of 40°F to 120°F (4°C to 49°C). All other types shall not be installed in areas where temperatures are outside the range of -40°F to 120°F (40°C to 49°C).~~

EXCEPTION No. 1: ~~Extinguishers of a type approved and listed for the temperature to which they are exposed, or they must be placed in an enclosure capable of maintaining the stipulated range of temperature.~~

EXCEPTION No. 2: ~~Extinguishers containing plain water only can be protected to temperatures as low as -40°F (-40°C) by the addition of an antifreeze stipulated on the extinguisher nameplate. Calcium chloride solutions shall not be used in stainless steel extinguishers.~~

EXCEPTION No. 3: ~~Extinguishers that use nitrogen as an expellant gas rather than carbon dioxide and are approved or listed for temperatures as low as -65°F (-54°C).~~

Authority: — Health and Safety Code Section 13160
Reference: — Health and Safety Code Section 13160

563.11. 563.1. Instruction Manual. An extinguisher instruction manual shall be provided to the owner or the owner's agent giving condensed instructions and cautions necessary to its installation, operation, inspection and maintenance. This manual shall be provided upon the sale or transfer of the extinguisher. The manual may be specific to the extinguisher involved or it may cover many types.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

564. Metric Units. Metric units of measurement in this standard are in accordance with the modernized metric system known as the International System of Units (SI). One unit (liter), outside of but recognized by SI, is commonly used in international fire protection. The units are listed in Table 1 with conversion factors.

TABLE 1

<u>Name of Unit</u>	<u>Unit Symbol</u>	<u>Conversion Factor</u>
liter	L	1 gal = 3.785 L
Cu decimeter	dm³	1 gal = 3.785 dm³
<u>Centimeter</u>	<u>Cm</u>	<u>1 in. = 2.540 cm</u>
<u>meter</u>	<u>M</u>	<u>1 ft. = 0.305 m</u>
<u>Kilogram</u>	<u>kg</u>	<u>1 pound (mass) = 0.454 kg</u>
<u>Degree Celsius</u>	<u>°C</u>	<u>5/9(°F-32) = °C</u>
<u>Bar</u>	<u>bar</u>	<u>1 psi = 0.0689 bar</u>

For additional conversions and information see ASTM E380, Standard for Metric Practice, ~~1989 Edition~~.

If a value for measurement as given in this standard is followed by an equivalent value in other units, the first stated is to be regarded as the requirement. A given equivalent value may be approximate.

The conversion procedure for the SI units has been to multiply the quantity by the conversion factor and then round the result to the appropriate number of significant digits.

NOTE: Authority cited: Section 13161, Health and Safety Code. Reference cited: Section 13161, Health and Safety Code.

Article 5. Selection and Distribution of Portable Fire Extinguishers

565. Selection of Fire Extinguishers.

(a) The selection of extinguishers for a given situation shall be determined by the authority having jurisdiction in accordance with adopted codes or ordinances. The character of the fires anticipated, the construction and occupancy of the individual property, the vehicle or hazard to be protected, ambient-temperature conditions, and other factors shall be considered. The number, size, placement, and limitations of use of extinguishers required shall be determined by using Sections 567 through ~~572~~ 573.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

565.1 Classification of Hazards.

(a) Light (low) Hazard. Locations where the total amounts of Class A combustible materials, including furnishings, decorations and contents, is of minor quantity. These shall include buildings or rooms occupied as offices, classrooms, churches, assembly halls, etc. This classification anticipates that the majority of contents are either noncombustible or so arranged that a fire is not likely to spread rapidly. Small amounts of Class B flammables used for duplicating machines, art departments, etc., are included provided that they are kept in closed containers and safely stored.

(b) Ordinary (Moderate) Hazard. Locations where the total amounts of Class combustibles and Class B flammables are present in greater amounts than expected under Light (Low) Hazard occupancies. These occupancies could consist of offices, classrooms, mercantile shops and allied storage, light manufacturing, research operations, auto showrooms, parking garages, workshop or support service areas of Light (Low) Hazard occupancies, and warehouses containing Class I or Class II commodities.

(c) Extra (High) Hazard. Locations where the total amount of Class A combustibles and Class B flammables are present, in storage, production use, and/or finished product over and above those expected and classed as ordinary (moderate) hazards. These occupancies could consist of woodworking, vehicle repair, aircraft and boat servicing, individual product display showrooms, product convention center displays, storage and manufacturing processes such as painting, dipping, coating, including flammable liquid handling. Also included is warehousing of, or in-process storage of other Class I and Class II commodities.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

565.1- 565.2. Selection by Hazard.

(a) Extinguishers shall be selected for the specific class or classes of hazards to be protected in accordance with the following subdivisions.

(b) Extinguishers for protecting Class A hazards shall be selected from the following: Water-type, antifreeze, aqueous film forming foam (AFFF), film forming fluoroprotein foam (FFFP), loaded stream, halogenated agent types, multipurpose dry chemical and bromochlorodifluoromethane (Halon 1211); wet chemical type.

(c) Extinguishers for protection of Class B hazards shall be selected from the following: bromotrifluoromethane (Halon 1301), bromochlorodifluoromethane (Halon 1211), carbon dioxide, dry chemical types, aqueous film forming foam (AFFF), and film forming fluoroprotein (FFFP), halogenated agent types, and water-type and water chemical extinguishers rated for Class B hazards.

(d) Extinguishers for protection of Class C hazards shall be selected from the following: bromotrifluoromethane (Halon 1301), bromochlorodifluoromethane (Halon 1211), carbon dioxide, and dry chemical types, halogenated agent types, and water mist types rated for Class C. Carbon dioxide extinguishers equipped with metal horns are not considered safe for use on fires in energized electrical equipment and, therefore, are not classified for use on Class C hazards.

(e) Extinguishers and extinguishing agents for the protection of Class D hazards shall be of types approved for use on the specific combustible-metal hazard.

(f) Fire extinguishers and extinguishing agents for the protection of Class K hazards shall be selected from either a wet chemical type or dry chemical type.

566. Application for Specific Hazards.

(a) Class B Fire Extinguishers for Pressurized Flammable Liquids and Pressurized Gas Fires. Fires of this nature are considered to be a special hazard. Class B fire extinguishers containing agents other than dry chemical are relatively ineffective on this type of hazard due to stream and agent characteristics. Selection of extinguishers for this type of hazard shall be made on the basis of recommendations by manufacturers of this specialized equipment. The system used to rate extinguishers on Class B fires (flammable liquids in depth) is not applicable to these types of hazards.

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It has been determined that special nozzle design and rates of agent application are required to cope with such hazards. Caution: It is undesirable to attempt to extinguish this type of fire unless ~~these~~ there is reasonable assurance that the source of fuel can be promptly shut off.

(b) ~~Fire Extinguisher Size and Placement for Cooking Grease Fires.~~ Fire extinguishers provided for the protection of cooking ~~grease fires~~ appliances that use combustible cooking media (vegetable or animal oils and fats) shall be ~~only of the Sodium bicarbonate or potassium bicarbonate dry chemical type listed and labeled for Class K fires.~~ Installation shall be in accordance with Table 3 for Extra (High) Hazard.

EXCEPTION: Fire extinguishers installed specifically for hazards in this section prior to January 1, 2002.

(c) Three-dimensional Class B Fires. A three-dimensional Class B fire involves Class B materials in motion such as pouring, running or dripping flammable liquids and generally includes vertical as well as one or more horizontal surfaces. Fires of this nature are considered to be a special hazard. Selection of extinguishers for this type of hazard shall be made on the basis of recommendations by manufacturers of this specialized equipment. The system used to rate extinguishers on Class B fires (flammable liquid in depth) is not directly applicable to this type of hazard.

(d) Water Soluble Flammable Liquid Fires (Polar Solvents). Extinguishers used for the protection of water soluble flammable liquids, such as alcohols, acetones, esters, ketones, etc., shall be selected in accordance with Section 565.2. AFFF type and FFFP type fire extinguishers shall not be used for the protection of water soluble flammable liquids, such as alcohols, acetone, esters, ketones, etc., unless specifically referenced on the extinguisher nameplate.

(e) Electronic Equipment Fires. Extinguishers for the protection of delicate electronic equipment shall be selected from the following: ~~bromotrifluoromethane (Halon 1301); bromochlorodifluoromethane (Halon 1211), Halon 1211/1301 and carbon dioxide type or a halogenated agent type, or a distilled water mist type with a minimum Class A: C Rating.~~

(f) In patient care areas and sleeping rooms of health care facilities, fire extinguishers, including the agents and expelling means, should be selected and utilized which would not be detrimental to patients and are appropriate for the type of fire expected, such as distilled water mist type fire extinguishers with a minimum "2-A: C" Rating.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

567. Distribution of Fire Extinguishers.

(a) The minimum number of fire extinguishers needed to protect a property shall be determined as outlined in this section. Additional extinguishers may be installed to provide more suitable protection. ~~Extinguishers shall not have a rating less than specified in Tables 2 and 3.~~

(b) Fire extinguishers shall be provided for the protection of both the building structure and the occupancy hazards contained therein.

(c) Required building protection shall be provided by fire extinguishers suitable for Class A fires.

(d) Occupancy hazard protection shall be provided by fire extinguishers suitable for such Class A, B, C, ~~or D~~ or K fire potentials as may be present.

(e) Extinguishers provided for building protection may be considered also for the protection of occupancies having a Class A fire potential.

(f) ~~Combustible~~ Buildings having an occupancy hazard subject to class B and/or Class C fires shall have a standard complement of Class A fire extinguishers for building protection, plus additional Class B and/or Class C extinguishers. Where fire extinguishers have more than one letter classification (such as 2A:20-B:C), they may be considered to satisfy the requirements of each letter class. When using multi-purpose extinguishers for the protection of Class B hazards, the maximum travel distances described in Table 3 must be observed.

(g) Rooms or areas shall be classified generally as light (low) hazard, ordinary (moderate) hazard or extra (high) hazard. Limited areas of greater or lesser hazards shall be protected as required.

(h) On each floor level, the area protected and the travel distances ~~are~~ shall be based on fire extinguishers installed in accordance with Tables 2 and 3.

(i) Fire extinguishers shall not be obstructed or obscured from view.

EXCEPTION: In large rooms, and in certain locations where visual obstruction cannot be completely avoided, means shall be provided to indicate the fire extinguisher's location.

(j) Fire extinguishers shall be conspicuously located along normal paths of travel where they will be readily accessible and immediately available in the event of a fire.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

567.1 Operating Conditions. Portable extinguishers shall be maintained in a fully charged and operable condition, and kept in their designated places at all times when they are not being used.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

567.2. Cabinets. Cabinets housing extinguishers shall not be locked.

EXCEPTION: Where extinguishers are subject to malicious use, locked cabinets may be used provided they include a means of emergency access and are approved by the authority having jurisdiction.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

567.3. Installation. Portable fire extinguishers other than wheeled types shall be securely installed on the hanger or in the bracket supplied or placed in cabinets or wall recesses. The hanger or bracket shall be securely and properly anchored to the mounting surface in accordance with the manufacturer's instructions. Wheeled-type fire extinguishers shall be located in a designated location.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

567.4. Brackets. Extinguishers installed under conditions where they are subject to dislodgment shall be installed in brackets specifically designed to cope with this problem.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

567.5. Physical Damage Protection. Extinguishers installed under conditions where they are subject to physical damage, (e.g., from impact, vibration, the environment) shall be adequately protected.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

567.6. Mounting. Fire extinguishers having a gross weight not exceeding 40 lbs (18.14kg) shall be installed so that the top of the fire extinguisher is not more than 5 ft. (1.53m) above the floor. Fire extinguishers having a gross weight greater than 40 lbs. (18.14kg) (except wheeled types) shall be so installed that the top of the fire extinguisher is not more than 3-1/2 ft. (1.07 m) above the floor. In no case shall the clearance between the bottom of the extinguisher and the floor be less than 4 in. (10.2 cm).

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

567.7. Sealed Cabinets. Where extinguishers are installed in closed cabinets, which are exposed to elevated temperatures, the cabinets shall be provided with screened openings and drains.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

567.8. Installation Temperatures. Water-type (water, AFFF, FFFP) extinguishers shall not be installed in areas where temperatures are outside the range of 40°F to 120°F (4°C to 49°C). Other types shall not be installed in areas where temperatures are outside the range of -40°F to 120°F (-40°C to 49°C). Fire extinguishers shall not be exposed to temperatures outside of the range shown on the fire extinguisher label.

EXCEPTION No. 1: Where fire extinguishers are installed in locations subject to temperatures outside these ranges, they shall be of a type approved and listed for the temperature to which they are exposed, or they shall be placed in an enclosure capable of maintaining the stipulated temperature range.

EXCEPTION No. 2: Fire extinguishers containing plain water only can be protected to temperatures as low as -40°F (-40°C) by the addition of an antifreeze stipulated on the extinguisher nameplate. Calcium chloride solutions shall not be used in stainless steel fire extinguishers.

EXCEPTION No. 3: Some fire extinguishers are approved or listed for use at temperatures as low as -65°F (-54°C).

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

568. Fire Extinguisher Size and Placement for Class A Hazards.

(a) ~~Minimal~~ Minimum sizes of fire extinguishers for the listed grades of hazards shall be provided on the basis of Table 2, except as modified by Section 568 (d). Extinguishers shall be located so that the maximum travel distances shall not exceed those specified in Table ~~3~~ 2, except as modified by Section 568 (d).

(b) Certain smaller fire extinguishers which are charged with a multipurpose dry chemical or ~~Halon-1211~~ halogenated agent are rated on Class B and Class C fires, but have insufficient effectiveness to earn the minimum 1-A rating even though they have value in extinguishing smaller Class A fires. They shall not be used to meet the requirements of Table 2.

TABLE 2

	Light (low) Hazard <u>Occupancy</u>	Ordinary (Moderate) Hazard <u>Occupancy</u>	Extra (High) Hazard <u>Occupancy</u>
Minimum rated single extinguisher	2-A	2-A	4-A*
Maximum floor area per unit of A	3,000 sq ft	1,500 sq ft	1,000 sq ft
Maximum floor area for extinguisher	11,250 sq ft	11,250 sq ft	11,250 sq ft
Max. travel distance to extinguisher	75 ft	75 ft	75 ft

*Two 2 1/2 gal (9.46 L) water type extinguishers can be used to fulfill the requirements of one 4-A rated extinguisher.

NOTE: 1 ft. = 0.305 m
1 sq ft = 0.0929 m²

(c) Extinguishers as specified in Table 2 may be replaced by uniformly spaced 1 1/2 inch (3.810 cm) hose stations for use by the occupants of the building. When hose stations are so provided they shall conform to Title 24, California Code of Regulations, Chapter 2-38. The location of hose stations and the placement of fire extinguishers shall be in such a manner that the hose stations do not replace more than every other extinguisher.

(d) Where the floor area of a building is less than that specified in Table 2, at least one extinguisher of the minimum size recommended shall be provided.

(e) The protection requirements may be fulfilled with extinguishers of higher rating provided the travel distance from anywhere in the building to such larger extinguishers shall not exceed 75 ft (22.7m), as shown in Table 2 above.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

569. Fire Extinguisher Size and Placement for Class B Fires other than for Fires in Flammable Liquids of Appreciable Depth.

(a) Minimal sizes of fire extinguishers for the listed grades of hazard shall be provided on the basis of Table 3. Extinguishers shall be located so that the maximum travel distances from anywhere in the building shall not exceed those specified in the table used.

EXCEPTION: Extinguishers of lesser rating, desired for small specific hazards within the general hazard area, may be used, but shall not be considered as fulfilling any part of the requirements of Table 3.

TABLE 3

<u>Type of Hazard</u>	<u>Basic Minimum Extinguisher Rating</u>	<u>Maximum Travel Distance to Extinguishers (in feet)</u>	<u>Maximum Travel Distance to Extinguishers (in meters)</u>
Light (low)	5B	30	9.15
	10B	50	15.25
Ordinary (moderate)	10B	30	9.15
	20B	50	15.25
Extra (high)	40B	30	9.15
	80B	50	15.25

NOTE 1: The specified ratings do not imply that fires of the magnitudes indicated by these ratings will occur, but rather to give the operators more time and agent to handle difficult spill fires that may occur.

NOTE 2: For fires involving water soluble flammable liquids see Section 566 (d).

NOTE 3: For specific hazard applications see Section 566.

(b) Two or more extinguishers of lower rating shall not be used to fulfill the protection requirements of Table 3.

(c) The protection requirements may be fulfilled with extinguishers of higher ratings provided the travel distance to such larger extinguishers shall not exceed 50 ft. (15.25 m) as shown in Table 3.

~~(d) For Class B extinguishers rated under the rating classification system used prior to 1955, their equivalency shall be in accordance with Table 4.~~

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

570. Fire Extinguisher Size and Placement for Class B Fires in Flammable Liquids of Appreciable Depth.

(a) Portable fire extinguishers shall not be installed as the sole protection for flammable liquid hazards of appreciable depth [greater than 1/4 in. (0.64 cm)] where the surface area exceeds 10 sq ft (0.93 m²). ~~For dip tanks containing flammable or combustible liquids exceeding 150 gallon (568 L) liquid capacity or having a liquid surface exceeding 4 sq ft (0.38 m²), see NFPA 34, Standard for Dipping and~~

Coating Processes Using Flammable or Combustible Liquids, 1989 Edition for requirements of automatic extinguishing facilities.

EXCEPTION: Where personnel who are trained in extinguishing fires in the protected hazards are available on the premises, the maximum surface area shall not exceed 20 sq. ft. (1.86 m²).

(b) For flammable liquid hazards of appreciable depth ~~such as in dip or quench tanks~~, a Class B fire extinguisher shall be provided on the basis of at least two numerical units of Class B extinguishing potential per sq ft (0.0929 m²) of flammable liquid surface of the largest ~~tank~~ hazard ~~within the area~~. For fires involving cooking grease or water-soluble flammable liquids, see 566 (b) and 566 (d).

~~EXCEPTION No. 1: Where approved automatic fire protection devices or systems have been installed for a flammable liquid hazard, additional portable Class B fire extinguishers may be waived. Where so waived, Class B fire extinguishers shall be provided as covered in Section 569(a) to protect areas in the vicinity of such protected hazards.~~

~~EXCEPTION No. 2: AFFF or FFFP type extinguishers may be provided on the basis of a 1B rating of protection per sq ft of hazard.~~

(c) Two or more extinguishers of lower ratings shall not be used in lieu of the extinguisher required for the largest ~~tank~~ hazard area.

~~EXCEPTION: Up to three AFFF or FFFP extinguishers of 2 1/2 gal (9.46 L) capacity may be used to fulfill these requirements provided the sum of the Class B ratings meets or exceeds the value required for the largest hazard area.~~

(d) Travel distances ~~from anywhere in the building~~ for portable extinguishers shall not exceed 50 ft (15.25 m) as shown in Table 3.

(e) Scattered or ~~W~~widely separated hazards shall be individually protected. An extinguisher in the proximity of a hazard shall be carefully located ~~outside the drainage path so as~~ to be accessible in the presence of a fire without undue danger to the operator.

TABLE 4

<u>Type and Capacity</u>	<u>Pre-1955</u>	<u>Equivalency</u>
Carbon Dioxide		
Under 7 lb	B-2	1-B
7 lb	B-2	2-B
10 to 12 lb	B-2	2-B
15 to 20 lb	B-1	2-B
25 to 26 lb	B-1	5-B
50 lb	B-1	10-B
75 lb	B-1	10-B
100 lb	B	10-B
Dry Chemical		
4 to 6 ¹ / ₄ lb	B-2	2-B
7 ¹ / ₂ lb	B-2	5-B
10 to 15 lb	B-1	5-B
20 lb	B-1	10-B
30 lb	B-1	20-B
75 lb and up	B	40-B

NOTE 1: ——— 1 gal = 3.785L
 1 lb = 0.454 kg

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

571. Fire Extinguisher Size and Placement for Class C Hazards.

(a) Fire extinguishers with Class C ratings shall be required where energized electrical equipment ~~may~~ can be encountered which would require a nonconducting extinguishing medium. This ~~will~~ requirement includes situations where fire either directly ~~involving or surrounding~~ involves or surrounds electrical equipment. Since the fire itself is a Class A or Class B hazard, the fire extinguishers ~~are~~ shall be sized and located on the basis of the anticipated Class A or Class B hazard.

NOTE: Electrical equipment should be de-energized as soon as possible to prevent reignition.

(b) ~~For extinguishers classified under the system used prior to 1955, the pre-1955 classifications of "C-2", "C-1" and "C" shall be equivalent to the current "C" designation.~~

~~EXCEPTION No. 1: Carbon Dioxide extinguishers with metallic horns shall not carry any "C" classification.~~

~~EXCEPTION No. 2: Vaporizing liquid extinguishers (carbontetrachloride or chlorobromomethane base, or methyl bromide) are not permitted.~~

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

572. Size and Placement for Class D Hazards.

(a) Fire extinguishers or extinguishing agents with Class D ratings shall be provided for fires involving combustible metals.

(b) Fire Extinguishing extinguishers or extinguishing agents (media) equipment shall be located not more than 75 ft (22.5 m) travel distance from the Class D hazard.

(c) Portable fire extinguishers or extinguishing agents (media) for Class D hazards shall be provided in those work areas where combustible metal powders, flakes, shavings, chips, or similarly sized products are generated.

(d) Size determination shall be in the basis of the specific combustible metal, its physical particle size, area to be covered, and recommendations by the extinguisher manufacturer on data from control tests conducted.

(e) The material safety data sheet for the Class D hazard involved should be consulted to assist in selecting the most effective extinguishing agent.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

573. Fire Extinguisher Size and Placement for Class K Fires.

(a) Fire extinguishers with a Class K rating shall be provided for hazards where there is a potential for fires involving combustible cooking media (vegetable or animal oils and fats).

(b) Maximum travel distance shall not exceed 30 ft (9.15m) from the hazard to the extinguishers.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

Article 6. Inspection, Maintenance and Recharging

574.1. Frequency of Inspection, General. Fire extinguishers shall be inspected, at least monthly by the building owner occupant or his/her authorized agent.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

574.2. Procedures. Monthly inspection of extinguishers shall include a check of at least the following items:

- (a) Located in designated place.
- (b) No obstruction to access or visibility.
- (c) Operating instructions on nameplate legible and facing outward.
- (d) Safety ~~S~~seals and tamper indicators not broken or missing.
- (e) Examine for obvious physical damage, corrosion, leakage or clogged nozzle.
- (f) Pressure gage reading or indicator in the operable range or position.
- (g) Determine fullness by hefting, and, if needed, by weighing.
- ~~(h) Determine if hydrostatic testing is required.~~
- ~~(i) Operating instructions on nameplate facing outward.~~
- (h) For wheeled units, the condition of the tires, wheels, carriage, hose, and nozzle checked.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

574.3. Corrective Action. When an inspection of any extinguisher reveals a deficiency in any of the conditions listed in (a), (b), and (h) of Section 574.2, immediate corrective action shall be taken.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

574.4. Rechargeable Extinguishers. When an inspection of any rechargeable extinguisher reveals a deficiency in any of the conditions listed in (c), (d), (e), (f) and (g) of Section 574.2, it shall be subjected to applicable maintenance procedures.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

574.5. ~~Disposable, Nonrechargeable, and Nonrefillable~~ Extinguishers. When an inspection of any ~~nonrefillable-disposable nonrechargeable~~ extinguisher reveals a deficiency in any of the conditions listed in (c), (d), (e), (f), and (g), of Section 574.2, it shall be discharged and removed from service.

EXCEPTION: ~~Disposable~~ Nonrechargeable extinguishers containing a halon agent shall be removed from service, not discharged, and returned to the manufacturer or local fire extinguisher distributor having the capability of recovering the halon agent.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

574.6. Recordkeeping.

(a) Personnel making inspections shall keep records for those extinguishers that were found to require corrective actions.

(b) At least monthly, the date the inspection was performed and the initials of the person performing the inspection shall be recorded.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

575. Servicing, General

Servicing which includes maintenance, recharging and hydrostatic testing shall be performed by concerns licensed by the State Fire Marshal having available the appropriate servicing manual(s), the proper types of tools, recharging agents and materials, lubricants, and manufacturer's recommended replacement parts or parts of equal quality. Maintenance, recharging and hydrostatic testing shall be done in accordance with the appropriate manufacturer's service manual (s) and the requirements of this chapter.

575.1 ~~Maintenance , Required Service Intervals. Frequency and Required Service Intervals.~~

(a) Fire extinguishers shall be subjected to ~~annual~~ maintenance annually as described in this chapter or immediately after use or when specifically indicated by an inspection or at the time of hydrostatic test, reveals tampering, damage, incorrect pressure reading, or corrosion. For purposes of maintenance, H hydrostatic tests required ~~anytime in during the same~~ calendar year shall be performed at the time of the annual maintenance or recharge ~~of that same year.~~

~~(b) — Factory sealed disposable (non-refillable) extinguishers shall not be serviced. These extinguishers may be replaced when the pressure indicator on the unit shows a loss of pressure below the acceptable amount as shown on the extinguisher label of the extinguisher. Regardless of the manufacturer's label, however, all disposable extinguishers must be replaced when the total loss of weight is one-fourth ounce ($\frac{1}{4}$ oz) or more of rated capacity as shown on the extinguisher label attached to the extinguisher.~~

(b) Nonrechargeable fire extinguishers shall not be recharged or hydrostatically tested but shall be discharged and removed from service at a maximum interval of 12 years from the date of manufacture.

EXCEPTION: Nonrechargeable fire extinguishers containing a halon agent shall be removed from service, not discharged, and returned to the manufacturer or fire extinguisher distributor having the capability of recovering the halon agent.

(c) When additional fire extinguishers are installed in excess of those required, the additional extinguishers shall be ~~serviced~~ subjected to maintenance and hydrostatically tested in the same manner and at intervals as set forth in this chapter for required extinguishers.

(d) New fire extinguishers that are fully charged by the manufacturer shall, after being sold, be ~~serviced~~ subjected to maintenance within one year from the date of manufacture in accordance with this chapter. If only the year is shown, the new extinguisher shall be due for ~~service~~ maintenance by January 1st of the year following the year of manufacture in accordance with this chapter.

EXCEPTION: A licensed fire extinguisher concern may attach the tag described in Section 596.1(a) and punch the new extinguisher block and date the extinguisher was sold. Extinguishers tagged in this manner shall be ~~serviced~~ subjected to maintenance one year from the date on the tag in accordance with this chapter. Extinguishers more than two years old from date of manufacture shall not be tagged as new extinguishers.

(e) At the time of installation and at each annual maintenance, extinguishers shall be placed in a fully charged and operable condition free from defects which may cause malfunctions.

(f) At the time of service, hydrostatic testing, or at any time when parts are replaced, an itemized invoice showing work performed and parts replaced shall be provided by the licensee to the owner or possessor of the fire extinguisher. ~~If service is performed more than thirty days prior to the due date for annual maintenance, the invoice shall bear a statement indicating the fire extinguisher was serviced early.~~

(g) The licensee shall offer to return all replaced parts to the portable fire extinguisher owner or owner's representative, except such parts as the licensee is required to return to the manufacturer of the portable fire extinguisher under any warranty arrangement.

(h) Annual maintenance or recharging service shall not be performed more than 30 days before ~~prior to the date the previous years maintenance, service or recharge is due~~ due date for annual maintenance without written permission from the owner or possessor of the fire extinguisher prior to service. This section shall not rule out the maintenance required by Section 575.1 (a).

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, 13177, 13190.3, Health and Safety Code.

575.2. Specific Service Maintenance Requirements.

(a) The procedures outlined in this ~~subchapter~~ are common to most fire extinguishers and shall be performed at each annual maintenance, in addition to the manufacturer's instructions or other requirements of this ~~subchapter~~. All contents shall be emptied from the extinguisher, except as provided herein in this ~~subchapter~~.

(b) Mechanical Parts. Any parts needed for replacement shall be the manufacturer's recommended replacement parts or parts of equal quality. Parts not designated as the manufacturer's recommended replacement parts shall be proven by a recognized testing laboratory to be of equal quality.

(c) If the source of leakage cannot be corrected by parts replacement, extinguishers shall be removed from service in accordance with Section ~~560.5~~ 577.1 of this chapter.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13177, 13190.3, Health and Safety Code.

~~575.3. Safety Pins. Upon completion of annual maintenance, an extinguisher shall have installed a safety pin compatible with the valve required by the ANSI/UL standards contained in 561.2. The safety pin shall be held in place with a seal as specified in Section 575.4.~~

~~EXCEPTION: Fire pails, drums and buckets.~~

575.3 Maintenance Procedures.

(a) Maintenance procedures shall include a thorough examination of the three basic elements of an extinguisher:

- (1) mechanical parts
- (2) extinguishing agent
- (3) expelling means

EXCEPTION: During annual maintenance, it is not necessary to internally examine nonrechargeable fire extinguishers, carbon dioxide fire extinguishers, halogenated agent fire extinguishers, wet chemical fire extinguishers or AFFF/FFFP fire extinguishers which use a pre-mixed charge. However, such extinguishers shall be thoroughly examined externally in accordance with the applicable items of 575.3 (a) (1) and Table 4.

For Stored Pressure Dry Chemical and Dry Powder Fire Extinguishers, see Section 575.4

For Carbon Dioxide Fire Extinguishers, see Section 575.5

For Stored Pressure Halogenated Agent Fire Extinguishers, see Section 575.6

For Stored Pressure Water Type Fire Extinguishers, see Section 575.7

For AFFF and FFP Fire Extinguishers that use a pre-mixed charge, see Section 575.8.

For Stored Pressure Wet Chemical Fire Extinguishers, see Section 575.16.

(b) Fire extinguishers shall be thoroughly examined externally and the appropriate corrective action performed in accordance with the applicable items of Table 4, External Examination Maintenance Checkpoints.

(c) Fire extinguishers shall be weighed on accurate scales and it shall be verified that the total weight is within the allowable tolerances specified by the manufacturer.

Exception: Water-type and wet chemical fire extinguishers that have the liquid amount specified on the extinguisher shell, a fill level mark or an anti-overfill tube.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

TABLE 4
External Examination Maintenance Checkpoints

Shell

1. Hydrostatic test date or date of manufacturer*
2. Corrosion*
3. Mechanical damage (denting or abrasion)*
4. Paint Condition
5. Presence of repairs (welding, soldering, brazing, etc.)
6. Broken hanger attachment, carrying handle lug

Corrective Action

1. Retest, if needed
2. Conduct hydrostatic test and refinish, or discard
3. Conduct hydrostatic test and refinish, or discard
4. Refinish
5. Discard or consult manufacturer
6. Discard or consult manufacturer

Nameplate

1. Illegible wording
2. Corrosion or loose plate

Corrective Action

1. Clean or replace
2. Inspect shell under plate and reattach plate

Nozzle or Horn

1. Damaged (cut, cracked, or worn)
2. Blocked openings
3. Damaged threads (corroded, crossed, or worn)
4. Aged (brittle)

Corrective Action

1. Replace
2. Clean
3. Replace
4. Replace

Hose Assembly

1. Damaged (cut, cracked, or worn)
2. Damaged coupling or swivel joint (cracked or corroded)
3. Damaged threads (corroded, crossed, or worn)
4. Inner tube cut at couplings
5. Electrically nonconductive between couplings (CO₂ hose only)
6. Hose obstruction
7. Damaged or missing hose retainer

Corrective Action

1. Replace
2. Replace
3. Replace
4. Repair or replace
5. Replace
6. Remove obstruction or replace
7. Repair or replace

Pull Pin or Valve Locking Device

1. Damaged (bent, corroded, or binding)
2. Missing

Corrective Action

1. Repair and lubricate, or replace
2. Replace

Gauge or Pressure-Indicating Device

1. Damaged or missing pointer*
2. Missing, deformed, or broken crystal*
3. Illegible or faded dial*
4. Corrosion*
5. Dented case or crystal retainer*
6. Immovable or corroded pressure-indicating stem (nongauge type)*

Corrective Action

1. Perform internal maintenance and replace gauge
2. Perform internal maintenance and replace gauge
3. Perform internal maintenance and replace gauge
4. Perform internal maintenance and replace gauge
5. Perform internal maintenance and replace gauge
6. Replace head assembly, depressurize, and replace shell or complete extinguisher

Shell or Cylinder Valve

1. Corroded, damaged or jammed lever, handle, spring, stem, or fastener joint*
2. Damaged outlet threads (corroded, crossed, or worn)*

Corrective Action

1. Perform internal maintenance and repair or replace as necessary
2. Perform internal maintenance and replace

Agent and Expelling Means

1. Improper extinguisher weight
2. Improper gauge pressure

Corrective Action

1. Perform internal maintenance and recharge
2. Perform internal maintenance and recharge

TABLE 4 (Continued)

Nozzle Shutoff Valve	Corrective Action
1. Corroded, damaged, jammed or binding lever, spring, stem, or fastener joint	1. Repair and lubricate, or replace
2. Plugged, deformed, or corroded nozzle tip or discharge passage	2. Clean or replace
<u>Nonrechargeable Shell</u>	<u>Corrective Action</u>
1. Corrosion*	1. Discard shell
2. Damaged seal disc (injured, cut, or corroded)*	2. Discard shell
3. Damaged threads (corroded, crossed, or worn)	3. Discard shell
4. Illegible weight markings*	4. Discard shell
<u>Carriage and Wheels</u>	<u>Corrective Action</u>
1. Corroded, bent, or broken carriage	1. Repair or replace
2. Damaged wheel (buckled or broken spoke, bent rim or axle, loose tire, low pressure, jammed bearing)	2. Clean, repair, and lubricate, or replace
<u>Carrying Handle</u>	<u>Corrective Action</u>
1. Broken handle lug	1. Discard shell or valve, or consult manufacturer
2. Broken handle	2. Replace
3. Corroded, jammed, or worn fastener joint	3. Clean or replace
<u>Seal or Tamper Indicator</u>	<u>Corrective Action</u>
1. Broken or missing	1. Perform internal maintenance
<u>Brackets</u>	<u>Corrective Action</u>
1. Corroded, worn, or bent	1. Repair and refinish, or replace
2. Loose or binding fit	2. Adjust fit or replace
3. Worn, loose, corroded, or missing screw or bolt	3. Tighten or replace
4. Worn bumper, webbing, or grommet	4. Replace
<u>Safety Relief Device</u>	<u>Corrective Action</u>
1. Corroded or damaged*	1. Depressurize and replace or consult manufacturer
2. Broken, operated, or plugged*	2. Depressurize and replace or repair

For nonrechargeable extinguishers, those items indicated with an asterisk cannot be inspected and serviced. If the corrective action requires the depressurization of the extinguisher, nonrechargeable halogenated agent fire extinguishers shall not be depressurized but shall be returned to the manufacturer or fire extinguisher distributor having the capability of recovering the halogenated agent.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

575.4. Seals. A nonferrous seal that can be broken by a normally applied force of 15 pounds or less shall be provided on every extinguisher, having a seated-valve type gas-cylinder assembly. Such seal shall be used to retain the safety pin in a locked position.

Authority: ~~Health and Safety Code Section 13160~~

Reference: ~~Health and Safety Code Sections 13160, 13162, 13177~~

575.4. Dry Chemical and Dry Powder Portable Fire Extinguishers.

(a) Stored Pressure Extinguishers

(1) At the time of annual maintenance, stored pressure dry chemical and dry powder fire extinguishers shall be discharged, emptied and subjected to the applicable maintenance procedures.

(2) Stored pressure dry chemical and dry powder extinguishers shall be fully discharged to check the operation of the discharge valve and pressure gauge.

(3) The dry chemical agent may be reused provided an approved closed recovery system is used and the agent is stored in a sealed container to prevent contamination.

(4) Prior to reuse, the dry chemical or dry powder agent shall be thoroughly checked to insure:

(A) Appropriate type agent.

(B) Agent is not contaminated.

(C) Agent is in a free flowing powdery condition.

(5) Where doubt exists with respect to the type, contamination, or condition of the dry chemical or dry powder agent, the agent shall be discarded.

(b) Cartridge and Cylinder Operated Extinguishers.

(1) At the time of annual maintenance, cartridge and cylinder operated dry chemical and dry powder fire extinguishers shall be emptied.

(2) Prior to reuse, the dry chemical or dry powder agent shall be thoroughly checked to insure:

(A) Appropriate type agent.

(B) Agent is not contaminated.

(C) Agent is in a free flowing powdery condition.

(3) Where doubt exists with respect to the type, contamination, or condition of the dry chemical or dry powder agent, the agent shall be discarded.

(4) Cartridges of cartridge operated portable fire extinguishers shall be replaced when the loss of weight as compared with the original weight as stamped on the cartridge is equal to or more than that as permitted in instructions on the label.

(5) Cartridges of every cartridge-operated extinguisher shall be weighed annually. The minimum graduation for the scale shall not be larger than 1/100 of the cartridge being weighed and shall be accurate to plus or minus one scale graduation. Scales used in commercial applications (legal for trade) shall comply with Sections 12500(a) and 12501.1, of the California Business and Professions Code and Section 4000, Title 4, of the California Code of Regulations. Straight faced spring scales (i.e. fish scales) shall not be used.

(6) Replacement cartridges for cartridge operated extinguishers shall conform to the manufacturer's requirements.

(c) Multipurpose dry chemicals shall not be mixed with alkaline-based dry chemicals.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13177, Health and Safety Code.

575.5. Cartridge Replacement.

~~(a) Cartridges of every cartridge operated extinguisher shall be weighed annually on a scale accurate to at least one eighth ounce (1/8 oz.).~~

~~(b) Replacement cartridges for cartridge operated extinguishers shall conform to one of the following:~~

~~(1) Recommended by the manufacturer of the extinguisher.~~

~~(2) Other Cartridges when proven to be of equal quality by a testing laboratory approved pursuant to section 550.6.~~

~~(c) Cartridges shall be replaced when the weight loss, as compared with the original weight stamped on the cartridge, is different from the following:~~

Type of and size of Extinguisher Weight Differential

~~Wheeled anti-freeze solution ————— 1/2 oz.~~

~~Wheeled wetting agent ————— 10%~~

~~4, 5, and 10 lb dry chemical ————— 1/4 oz.~~

~~20 and 30 lb dry chemical ————— 1/2 oz.~~

~~Authority: ————— Health and Safety Code Section 13160~~

~~Reference: ————— Health and Safety Code Sections 13160, 13177~~

575.5. Carbon Dioxide Extinguishers. Internal maintenance of carbon dioxide extinguishers shall be performed every 5 years at the time of hydrostatic test. The components shall be replaced in accordance with the manufacturer's recommendations.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

575.6. Anti-freeze Solutions.

~~Anti-freeze solutions for anti-freeze extinguishers shall be put through a fine strainer prior to placing it into the extinguisher so as to prevent any possibility of undissolved salts impairing the normal function of the extinguisher.~~

~~Authority: ————— Health and Safety Code Section 13160~~

~~Reference: ————— Health and Safety Code Sections 13160, 13177~~

575.6 Halogenated Agent Extinguishers.

(a) Every 6 years, stored pressure halogenated fire extinguishers that require a 12-year hydrostatic test shall be emptied and subjected to the maintenance procedures as required by Article 6.

(b) The removal of Halon 1211 from fire extinguishers shall only be done using a halon closed recovery system in compliance with the 1997 3rd Edition of the UL Standard 2006, Standard for Halon 1211 Recovery/Recharge Equipment. The removal of agent from other halogenated agent fire extinguishers shall only be done using a closed recovery system.

(c) The extinguisher cylinder shall be examined internally for contamination and/or corrosion. The halogenated agent retained in the system recovery cylinder shall only be used if no evidence of internal contamination is observed in the extinguisher cylinder. Halogenated agent removed from extinguishers that contain evidence of internal contamination or corrosion shall be processed in accordance with the manufacturer's instruction.

(d) When the applicable maintenance procedures are performed during periodic recharging or hydrostatic testing, the 6-year requirement shall begin from that date of the recharging or testing.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

575.7. ~~Expellants other than Cartridges.~~

~~(a) Expellants other than cartridges shall be limited to dry nitrogen and conform to manufacturer instructions.~~

~~EXCEPTION: Air may be used as an expellant in pressurized water base type portable extinguishers only.~~

~~(b) Nitrogen. Nitrogen, when used as an expellant charge, shall conform the Fire Test and Performance Standards, Section 561.2.(a).~~

~~Authority: Health and Safety Code Section 13160~~

~~Reference: Health and Safety Code Section 13160, 13177~~

575.7. Stored Pressure Water Type Extinguishers. Stored pressure extinguishers containing a water or loaded stream agent shall be disassembled on an annual basis and subjected to a complete maintenance in accordance with Section 575.3. Prior to disassembly, the extinguisher shall be fully discharged to check the operation of the discharge valve and pressure gauge.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

575.8. Maintenance of Dry Chemical Portable Fire Extinguishers.

~~(a) Except as provided in this section, servicing of Dry Chemical Portable Fire Extinguishers shall follow procedures outlined in Section 575.14.~~

~~(b) Miscellaneous. At the time of annual maintenance, dry chemical portable fire extinguishers shall be emptied. The dry chemical shall be visually inspected using a screen of not more than one-fourth inch (1/4") mesh to be sure it is in a freely running, powdery condition free of foreign matter. Chemical containing foreign matter, cakes, or lumps shall not be reused.~~

(c) Cartridges of cartridge operated portable fire extinguishers shall be replaced when the loss of weight as compared with the original weight as stamped on the cartridge is equal to or more than that as permitted in instructions on the label.

(d) Wheeled pressurized dry chemical extinguishers shall maintain proper expelling pressure as indicated in the manufacturer's instructions.

(e) Dry Chemical may be returned to the same extinguisher from which it was removed unless the following conditions were found to exist.

(1) Dry Chemical is not free running

(2) Dry Chemical is contaminated with foreign material.

(3) Dry Chemical is wrong type for use intended.

(f) Chemicals other than those recommended by the manufacturer shall not be used in dry chemical extinguishers except when proven to be of equal quality by a testing laboratory approved pursuant to Section 550.6.

Authority: Health and Safety Code Section 13160

Reference: Health and Safety Code Sections 13160, 13177

575.8. AFFF and FFFP Extinguishers. AFFF and FFFP fire extinguishers shall be maintained in accordance with the following:

(a) Pre-Mix: Extinguisher shall be externally examined annually, and broken down and the agent replaced every three years.

(b) Solid Type:

(1) Cartridge shall be removed and the extinguisher serviced in accordance with Section 575.3, and the cartridge re-installed.

(2) Cartridges shall be replaced with a new one every five years.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

575.9. Standard Fire Pails, Drums with Pails, and Bucket Tanks.

(a) Small water supplies applied with fire pails are of limited fire-extinguishing value. The following combinations are considered as possessing two units of extinguishing potential (2-A) for Class A fires:

(1) Five 12-qt (11-L) water-filled standard fire pails

(2) Six 10-qt (9-L) water-filled standard fire pails.

(3) Drum, cask, or barrel of approximately 55-gal (208-L) capacity, with standard fire pails [either (1) or (2) above] immersed therein.

(4) Bucket tanks of 25- to 55-gal (95- to 208L) capacity, with standard fire pails (either (1) or (2) above) attached.

(b) Standard fire pails shall be made of galvanized steel of at least No. 24 United States Steel gage, with a flat bottom welded in place or otherwise suitably reinforced, furnished with stamped ears welded in place and with strong wire bail and loose-fitting metal cover to exclude debris and retard evaporation.

(c) Casks, drums, or barrels shall be of metal of No. 24 United States Steel gage thickness or better, and shall have covers. Fire pails shall be hung on sides of the containers or immersed therein. Pails, casks, drums, or bucket tanks shall be painted bright red with the word "FIRE" stenciled in large letters on their outside with black or other contrasting colored paint. If anti-freezing solution is used, the surfaces of pails, drums, or bucket tanks should be coated with red lead or oil, followed by a coat of asphalt-base paint. Casks should be heavily coated with pitch.

(d) In addition to the manufacturer's instruction, the following service procedures shall be performed:

(1) ~~The extinguishing agent shall be emptied from the container and replaced to the fill level with clean material.~~

(2) ~~Containers shall be checked for corrosion, broken or missing handles. Containers shall be replaced if corroded or found to have missing handles. (Handles may be replaced if the container is designed to accept a replacement.)~~

(3) ~~When applicable, the extinguishing agent shall be provided an anti-freeze solution.~~

Authority: _____ Health and Safety Code Section 13160

Reference: _____ Health and Safety Code Sections 13160, 13177

575.9. Pump-Tank Extinguishers. Every 12 months, pump-tank water and pump-tank calcium chloride base antifreeze types of extinguishers shall be recharged with new chemicals or water, as applicable.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~**575.10 Stored Pressure Extinguishers.** Stored pressure types containing a water or loaded stream agent shall be disassembled on an annual basis and subjected to a complete maintenance in accordance with Section 575.14. Prior to disassembly the extinguisher shall be fully discharged to check the operation of the discharge valve and pressure gauge.~~

Authority: _____ Health and Safety Code Section 13160

Reference: _____ Health and Safety Code Section 13160

575.10. Out of Service. Fire extinguishers removed from service for maintenance or recharge shall be replaced by fire extinguishers suitable for the type of hazard protected and shall be of at least equal rating.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~**575.11 Conductivity Test.** An annual conductivity test shall be conducted on all carbon dioxide hose assemblies. Hose assemblies found to be noneconductive shall be replaced.~~

Authority: _____ Health and Safety Code Section 13160

Reference: _____ Health and Safety Code Section 13160

575.11. Safety Pins. Upon completion of annual maintenance, an extinguisher shall have installed a safety pin compatible with the valve required by the ANSI/UL standards contained in 561.2. The safety pin shall be held in place with a seal as specified in Section 575.12.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, 13177, Health and Safety Code.

575.12. Halon Extinguisher Maintenance Interval

(a) ~~Every six years, halon extinguishers that require a 12-year hydrostatic test shall be emptied and subjected to all applicable maintenance procedures, including those contained in Section 578.10. When the applicable maintenance procedures are performed during periodic recharging or hydrostatic testing, the six-year requirement shall begin from that date.~~

~~EXCEPTION: Extinguishers having nonrefillable disposable containers are exempt.~~

~~(b) Upon completion of the maintenance procedure prescribed by Section 575.12(a), each extinguisher shall be fitted with a self adhesive tag of metal or equally durable material. The tag shall contain the same information as prescribed by Section 596.(d) and 596.(e), and conform to the format prescribed in Section 596.11.(a).~~

~~Authority: Health and Safety Code Section 13160~~

~~Reference: Health and Safety Code Section 13160~~

575.12. Seals or Tamper Indicators.

(a) A tamper seal or tamper indicator shall be provided on every portable fire extinguisher. Tamper seals shall be component recognized by an approved testing laboratory for use on fire extinguishers or be the manufacturer's approved replacement.

(b) At the time of maintenance, the tamper seal of rechargeable fire extinguishers shall be removed by operating the pull pin or locking device. After the applicable maintenance procedures are completed, a new tamper seal shall be installed.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160 and 13162, Health and Safety Code.

~~**575.13 Out of Service.** Extinguishers out of service for maintenance or recharge shall be replaced by spare extinguishers as required by Section 591.5.~~

~~Authority: Health and Safety Code Section 13160~~

~~Reference: Health and Safety Code Section 13160~~

575.13. Anti-freeze Solution.

Anti-freeze solution for anti-freeze extinguishers shall be put through a fine strainer prior to placing it into the extinguisher so as to prevent any possibility of undissolved salts impairing the normal function of the extinguisher.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, Health and Safety Code.

~~**575.14 Maintenance Procedures.** Maintenance procedures shall include a thorough examination of the three basic elements of an extinguisher:~~

- ~~(a) mechanical parts,~~
- ~~(b) extinguisher agent, and~~
- ~~(c) expelling means.~~

~~EXCEPTION No. 1: It is not necessary during the annual maintenance, to internally examine CO2 or halon extinguishers. HOWEVER, such extinguishers shall be thoroughly examined externally in accordance with the applicable items of 574.2.~~

~~EXCEPTION No. 2: Factory sealed ("disposable type") extinguishers shall be inspected and maintained only in accordance with the nameplate instructions, see and Section 574.2.~~

~~EXCEPTION No. 3: For AFFF and FFFP Extinguishers, see Section 577.2.~~

575.14. Nitrogen Cylinder Operated Wheeled Extinguishers.

Pressure regulators and nitrogen cylinders on wheeled fire extinguishers shall be maintained in accordance with manufacturer's instructions.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13177, Health and Safety Code.

575.15 Conductivity Test.

(a) An annual conductivity test shall be conducted on all carbon dioxide hose assemblies. Hose assemblies found to be nonconductive shall be replaced.

(b) Carbon dioxide hose assemblies that pass a conductivity test shall have the test information recorded on a suitable metallic label or equally durable material that has a minimum size of ½ in. x 3 in. (1.3 cm x 7.6 cm). The label shall be affixed to the hose by means of a heatless process. The label shall include the following information:

(1) Month and year the test was performed, indicated by perforation, such as is done by a hand punch.

(2) Initials and EE# of person performing the test.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

575.16 Wet Chemical Fire Extinguishers.

Internal maintenance of wet chemical fire extinguishers shall be performed every 5 years at the time of hydrostatic test in accordance with the manufacturer's recommendations.

Authority: Health and Safety Code Section 13160

Reference: Health and Safety Code Section 13160

~~**576.1. Recharging, General.** All rechargeable type extinguishers shall be recharged after use or as indicated by an inspection or when performing maintenance. When performing the recharging, the recommendations of the manufacturers shall be followed. For recharge chemicals, see Section 578.1.~~

~~Authority: Health and Safety Code Section 13160~~

~~Reference: Health and Safety Code Section 13160~~

576.1. Maintenance Recordkeeping.

Upon completion of the maintenance procedures prescribed by Section 575.3, each portable fire extinguisher shall be fitted with an annual maintenance tag as prescribed in Article 9.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, 13177, Health and Safety Code.

~~**577.1. Pump-Tank Recharging.** Every 12 months, pump-tank water, and pump-tank calcium chloride base antifreeze types of extinguishers shall be recharged with new chemicals or water, as applicable.~~

~~Authority: Health and Safety Code Section 13160~~

~~Reference: Health and Safety Code Section 13160~~

577.1. Condemned Extinguishers.

(a) Portable fire extinguishers shall not be repaired except as permitted by manufacturer's instructions using manufacturer's recommended replacement parts or parts of equal quality. Portable fire extinguishers shall not be converted from one type or class to another type or class of extinguisher.

(b) Portable fire extinguishers which have been repaired, converted or altered in conflict with Section 575.2(c) are prohibited from use as portable fire extinguishers. Such extinguishers shall be removed from service and tagged with a red tag bearing the term "Condemned" on each face.

EXCEPTION: The exchange of defective or broken parts with approved parts as defined in Section 557.16(b) or equipment or materials listed as defined in Section 557.12(c) shall not be construed as "repair".

(c) Condemned portable fire extinguishers shall be destroyed by the owner or at the owner's direction.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, 13177, Health and Safety Code.

~~577.2. AFFF and FFFP.~~ ~~AFFF and FFFP fire extinguishers shall be serviced in accordance with the following:~~

~~(a) Pre-Mix: Extinguisher shall be externally examined annually, and broken down and the agent replaced every five years.~~

~~(b) Solid Type:~~

~~(1) Cartridge shall be removed and the extinguisher serviced in accordance with Section 578.12, and the cartridge re-installed.~~

~~(2) Cartridges shall be replaced with a new one every five years.~~

~~Authority: Health and Safety Code Section 13160~~

~~Reference: Health and Safety Code Section 13160~~

577.2. Obsolete Fire Extinguishers.

The following types of fire extinguishers are considered obsolete and shall be removed from service:

(1) Soda acid types

(2) Chemical foam (excluding AFFF and FFFP)

(3) Vaporizing liquid (e.g., carbon tetrachloride)

(4) Cartridge-operated water

(5) Cartridge-operated loaded stream

(6) Copper or brass shell fire extinguishers (excluding pump tanks) joined by soft solder or rivets

(7) Stored pressure water extinguishers with fiberglass shells

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

578.1. Recharging, General :

(a) All rechargeable type extinguishers shall be recharged after use or as indicated by an inspection or when performing maintenance.

(b) When performing the recharging, the recommendations of the manufacturers shall be followed. For recharge chemicals, see Section 578.2.

(c) The amount of recharge agent shall be verified by weighing on an accurate scale. The total weight shall be within the allowable tolerances specified by the manufacturer.

Exception: Water-type and wet chemical fire extinguishers that have the liquid amount specified on the extinguisher shell, a fill level mark or an anti-overfill tube.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

578.1 578.2. Recharge Chemicals Agents. Only those ~~materials~~ agents specified on the nameplate, or ~~materials~~ agents proven to have equal chemical composition, and physical characteristics; and fire extinguishing capabilities shall be used. Agents listed specifically for use with the fire extinguisher shall be considered to comply with the requirements of this section.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

578.2 Dry Chemicals. ~~Multipurpose dry chemicals shall not be mixed with alkaline based dry chemicals.~~

Authority: ~~Health and Safety Code Section 13160~~

Reference: ~~Health and Safety Code Section 13160~~

578.3 Checking of Partially Discharged Extinguishers. ~~The remaining agent in a partially discharged dry chemical or halon extinguisher shall be thoroughly checked for the proper type, contamination and condition. Agent found to be inappropriate, the wrong type, or contaminated, shall not be reused.~~

Authority: ~~Health and Safety Code Section 13160~~

Reference: ~~Health and Safety Code Section 13160~~

578.4 578.3. Dry Powder. Pails or drums containing dry powder agents for scoop or shovel application for use on metal fires shall be kept full and covered at all times. The dry powder shall be replaced if found damp.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

578.5 578.4. Replacement Pressure Gauge. Replacement pressure gauges shall have the proper indicated charging (service) pressure, be marked for use with the agent in the extinguisher and be compatible with the extinguisher valve body material. ~~The gauge used to set the regulated source of pressure shall be calibrated at least annually.~~

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~578.6~~ 578.5. Precautionary Pressurization Measures.

(a) A rechargeable stored pressure type extinguisher shall be pressurized only to the charging pressure specified on the extinguisher nameplate. A regulated source of pressure, set no higher than 25 psi (172 kPa) above the operating (service) pressure, shall be used to pressurize fire extinguishers. An unregulated source of pressure, such as a nitrogen cylinder without a pressure regulator, shall never be used because the fire extinguisher could be over-pressurized and possibly rupture. A fire extinguisher shall never be left connected to the regulator of a high-pressure source for an extended period of time. A defective regulator could cause the container to rupture due to excess pressure.

(b) The gauge used to set the regulated source of pressure shall be calibrated at least annually.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~578.7~~ 578.6. Pressurizing Gas. Only standard industrial grade nitrogen with a dew point of -60°F (-51°C) or lower (CGA nitrogen specification G10.1, grades D through P) shall be used to pressurize stored pressure dry chemical, dry powder and Halon type fire extinguishers. Compressed air through moisture traps shall not be used for pressurizing even though so stated in the instructions on older fire extinguishers.

EXCEPTION No. 1: Compressed air may be used from special compressor systems capable of delivering air with a dew point of -60°F (-51.1°C) or lower. The special compressor system shall be equipped with an automatic monitoring and alarm system to ensure that the dew point remains at or below -60°F (-51.1°C) at all times.

EXCEPTION No. 2: Some fire extinguishers are required to be pressurized with argon. They shall be repressurized only with the type of expellant gas referred to on the fire extinguisher label.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~578.8~~ 578.7. Conversion of Extinguisher Types. No extinguisher shall be converted from one type to another, nor shall any extinguisher be converted to use a different type of extinguishing agent.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~578.9.~~ 578.8. Removal of Moisture. For all non-water types of extinguishers any moisture shall be removed before recharging.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~578.10 Halogenated Agent Reuse.~~ ~~After July 1, 1992, the removal of extinguishing agent from halogenated agent extinguishers shall only be done using a halon closed recovery system in compliance with UL Standard 2006, Standard for Halon 1211 Recovery/Recharge Equipment, 1st Edition. The extinguisher cylinder shall be examined internally for contamination and/or corrosion. The halon agent, retained in the system recovery cylinder, shall be used only if no evidence of internal contamination is observed in the extinguisher cylinder. Halon removed from extinguishers that contain evidence of internal contamination or corrosion shall be processed in accordance with the manufacturer's instructions.~~

Authority: ~~Health and Safety Code Section 13160~~
Reference: ~~Health and Safety Code Section 13160~~

~~578.11~~ 578.9. Carbon Dioxide Recharging. The vapor phase of carbon dioxide shall not be less than 99.5 percent carbon dioxide. The water content of the liquid phase shall not be more than 0.01 percent by weight [-30°F (-34.4°C) dew point]. Oil content of the carbon dioxide shall not exceed 10 ppm by weight.

NOTE: Carbon Dioxide obtained from dry ice converters will generally be unsatisfactory unless it is properly processed to remove excess water and oil. The preferred source of carbon dioxide for recharging extinguishers is from a low-pressure supply, either directly or via dry cylinders used as an intermediary means.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~578.12~~ 578.10. Leak Test.

(a) After charging, a leak test shall be performed on stored pressure and self-expelling types fire extinguishers.

(b) Leak testing of halogenated agent extinguishers shall not use water. A halogenated gas leak detector shall be used to determine leakage.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~578.13~~ 578.11. Recharging Water Types. When recharging stored pressure extinguishers, overfilling resulting in improper discharge is to be avoided. The proper amount of liquid agent shall be determined by using one of the following:

- (a) exact measurement in gallons, or by weight.
- (b) use of an anti-overfill tube when provided, or
- (c) use of a fill mark on extinguisher shell, when provided.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~578.12.~~ Wet Chemical Agent Re-use. Wet chemical agents shall not be re-used. If a wet chemical extinguisher is partially discharged, all remaining wet chemical shall be discarded.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

Article 7. Hydrostatic Testing

591.1. Hydrostatic Testing, General. Hydrostatic testing shall be performed by persons licensed by the State Fire Marshal in pressure testing procedures and safeguards, and having available suitable testing equipment, facilities and appropriate servicing manual(s).

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

591.2. Corrosion. If, at any time, an extinguisher shows evidence of corrosion or mechanical damage, it shall be hydrostatically tested, subject to the provisions of Section 591.6.

EXCEPTION No. 1: Pump tanks do not require a hydrostatic test.

EXCEPTION No. 2: Extinguishers having nonrefillable disposable containers shall be removed from service in accordance with Section 574.5.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

591.3. Written Certification. Written approval from the D.O.T. to operate the equipment must be obtained by a licensed portable fire extinguisher concern before performing D.O.T. required hydrostatic tests of ~~high-pressure~~ cylinders. This written approval shall be available to the State Fire Marshal or authorized representative for inspection.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13177, Health and Safety Code.

591.4. Restricted Service. Any portable fire extinguisher requiring a hydrostatic test shall not be serviced until such extinguisher has been subjected to and passed the required hydrostatic test.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13177, Health and Safety Code

591.5. Replacement Extinguisher. Portable fire extinguishers shall not be removed from the premises for hydrostatic testing or any other purpose, without first replacing the extinguisher with a comparable unit.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, 13177, Health and Safety Code

591.6. Examination of Cylinder Condition. When a extinguisher cylinder or ~~shell~~ shell has one or more conditions listed in this section, it shall be destroyed by the owner or at the owner's direction:

- (a) When there exists repairs by soldering, welding, brazing, or use of patching compounds.
NOTE: For welding or brazing on mild steel shells, consult the manufacturer of the extinguisher.
- (b) When the cylinder or shell threads are damaged.

- (c) When there exists corrosion that has caused pitting, including under removable nameplate band assemblies.
- (d) When the extinguisher has been burned in a fire.
- (e) When a calcium chloride type of extinguishing agent was used in a stainless steel extinguisher.
- (f) When the shell is of copper or brass construction joined by soft solder or rivets.
- (g) All inverting-type extinguishers.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

591.7. Aluminum Shell/Cylinder. Extinguishers having aluminum cylinders or shells suspected of being exposed to temperatures in excess of 350°F (177°C) shall be removed from service.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

592. Frequency. At intervals not exceeding those specified in Table 5, extinguishers shall be hydrostatically tested.

EXCEPTION No. 1: Nonrefillable factory-sealed disposable containers do not require hydrostatic testing. (See Section 592.4.)

EXCEPTION No. 2: Extinguishers utilizing a ~~high-pressure~~ cylinder that has been manufactured to D.O.T. markings specifications shall be hydrostatically tested, or replaced, according to the requirements of D.O.T.

EXCEPTION No. 3: For extinguishers not covered in Exceptions No. 1 and 2 the first retest may be conducted within 12 months of the specified test intervals.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

592.1. Compressed Gas Cylinders and Cartridges. Nitrogen cylinders or cartridges used for inert gas storage used as an expellant for wheeled extinguishers shall be hydrostatically tested every five years.

EXCEPTION: Cylinders (except those charged with carbon dioxide) complying with Part 173.34(e) 15, Title 49, Code of Federal Regulations, shall be hydrostatically tested every 10 years.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

592.2. Hose Assemblies.

(a) A hydrostatic test shall be performed on extinguisher hose assemblies, which are equipped with a shutoff nozzle at the end of the hose. The test interval shall be the same as specified for the extinguisher on which the hose is installed.

(b) Test pressures for hose assemblies shall be as follows:

(1) Carbon Dioxide - 1,250 psi

(2) Dry Chemical - 300 psi or at service pressure, whichever is higher.

(c) Hose assemblies passing the hydrostatic test shall be thoroughly dried internally. If heat is used, the temperature shall not exceed 150°F (66°C).

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

592.3 Vehicles. Extinguishers installed on vehicles shall be hydrostatically tested every five years.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

592.4. Nonrefillable Factory-sealed Disposable Containers. Nonrefillable factory-sealed disposable containers shall not be reused and shall be disposed of pursuant to the requirements of Section 574.5.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~**592.5. Obsolete Fire Extinguishers.** Obsolete fire extinguishers shall include the following types. These extinguishers shall be removed from service.~~

~~(a) All inverting type extinguishers; and~~

~~(b) Cartridge operated water, foam and wetting agent extinguishers.~~

~~Authority: Health and Safety Code Section 13160~~

~~Reference: Health and Safety Code Sections 13160, 13177~~

~~**592.6. Copper, Brass, or Fiberglass Shells.**~~

~~(a) All types of extinguishers with copper or brass shells joined by soft solder are prohibited from hydrostatic testing.~~

~~(a) Stored pressure water extinguisher with fiber glass shells (pre 1976) are prohibited from hydrostatic testing due to manufacturer's recall.~~

~~Authority: Health and Safety Code Section 13160~~

~~Reference: Health and Safety Code Section 13160~~

TABLE 5
Hydrostatic Test Interval For Extinguishers

<u>Extinguisher Type</u>	<u>Test Interval (Years)</u>
Stored Pressure Water and/or Antifreeze/Loaded Stream	5
AFFF (Aqueous Film Forming Foam)	5
FFFP (Film Forming Fluoroprotein Foam)	5
<u>Wet Chemical</u>	<u>5</u>
Dry Chemical With Stainless Steel Shells	5
Carbon Dioxide	5
Dry Chemical, Stored Pressure with Mild Steel Shells, Braze Brass Shells, or Aluminum Shells	12
Dry Chemical, <u>Cartridge and</u> Cylinder-Operated, with Mild Steel Shells	12
Bromotrifluoromethane Halon 1301 <u>Halogenated Agents</u>	12
Bromochlorodifluoromethane Halon 1211	12
Dry Powder, Stored Pressure, Cartridge or Cylinder Operated with Mild Steel Shells	12

593.1. Test Pressures, High Pressure Cylinders.

(a) Carbon dioxide extinguishers shall be tested at 5/3 the service pressure as stamped into the cylinder.

EXCEPTION: Carbon dioxide extinguishers having cylinder specification ICC3 shall be tested at 3,000 psi (20,685 kPa).

(b) Nitrogen cylinders and carbon dioxide cylinders used with wheeled extinguishers shall be tested at 5/3 the service pressure as stamped into the cylinder.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

593.2. Stored Pressure Types. All stored pressure types of extinguishers shall be hydrostatically tested at the factory test pressure not to exceed three times the ~~service~~ normal operating pressure.

EXCEPTION: Extinguishers manufactured to D.O.T. specifications shall be hydrostatically tested according to the requirements of D.O.T.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

593.3. Cartridge-Operated Types. Cartridge-cylinder-operated dry chemical and dry powder types of extinguishers shall be hydrostatically tested at their original factory test pressure as shown on the nameplate or shell.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

594.1. Test Equipment and Procedures, General. When extinguisher shells, cartridges or cylinders fail a hydrostatic pressure test, they shall be destroyed by the owner or at the owner's direction.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

594.2. Test Equipment for ~~High Pressure~~ D.O.T. Specification Cylinders. The equipment for testing ~~high pressure D.O.T. specification~~ cylinders and cartridges shall be of the ~~water jacket~~ type that meets the specifications of the pamphlet Methods for Hydrostatic Testing of Compressed Gas Cylinders (Pamphlet C-1), published by the Compressed Gas Association.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

594.3. Test Equipment for Low Pressure Non-D.O.T. Specification Cylinders.

(a) The equipment for testing low pressure non-D.O.T. specification cylinders consists of the following:

(1) A hydrostatic test pump, hand or power operated and equipped with appropriate check valves and fittings, capable of producing not less than 150 percent of the test pressure. It is to include appropriate check valves and fittings.

(2) A flexible connection shall be provided with necessary fittings to test through the extinguisher nozzle, test bonnet, or hose outlet, as is applicable, for attachment to the test pump.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

594.4. Testing Procedures.

(a) ~~High pressure cylinders~~ D.O.T. specification cylinders.

(1) In addition to the visual examinations required prior to test as stated in Section 591.6, an internal examination shall be made prior to the hydrostatic test. The procedures for this internal examination shall be in accordance with the requirements of the Standard for Visual Inspection of Compressed Gas Cylinders (CGA C-6) and Standard for Visual Inspection of High Pressure Aluminum Compressed Gas Cylinders (CGA C-6.1) (~~2nd Edition~~), published by the Compressed Gas Association.

(2) The hydrostatic testing of ~~high pressure gas~~ D.O.T. specification cylinders and ~~cartridges~~ shall be in accordance with the procedures specified in the pamphlet Methods for Hydrostatic Testing of Compressed Gas Cylinders (Pamphlet C-1) (~~6th Edition~~), published by the Compressed Gas Association.

(b) Low Pressure Non-D.O.T. Specification Cylinders.

(1) All valves and internal parts shall be removed and the extinguisher emptied.

EXCEPTION: On some dry chemical and dry powder extinguishers (cartridge- operated), the manufacturer recommends that certain internal parts not be removed.

(2) All traces of extinguishing materials removed from the inside of dry chemical and dry powder type shells before filling with the test liquid.

(3) The cartridges, and some cartridge receivers of dry chemical and dry powder extinguishers having externally mounted gas ~~cartridges~~ cartridges, shall be removed and a suitable plug inserted into the shell opening at the point of removal.

(4) On wheeled extinguishers of the stored-pressure water, loaded stream, or cartridge-operated types, the discharge nozzle must be removed and the complete remaining assembly, including the hose, then tested as described in Section 592.2.

(5) On all wheeled dry chemical, dry powder, Halon 1211, AFFF/FFFP, and carbon dioxide extinguishers equipped with a shutoff nozzle at the outlet end of the hose, the hose (complete with couplings but without the nozzle) shall be removed and tested separately.

(6) On all wheeled stored pressure dry chemical extinguishers, the head assembly is to be removed and be replaced with a suitable test bonnet.

(7) The hose of the hydrostatic test pump is then attached by the flexible connection to the discharge nozzle, hose assembly, test bonnet, or test fitting, as is applicable. In the case of wheeled dry chemical and dry powder extinguishers, procedures and fittings should be those recommended by the manufacturer.

(8) The test liquid supply to the test pump is to be turned on and the extinguisher then filled to the top of its collar.

(9) For extinguishers tested with their cap in place, the cap must be tightened SLOWLY while the test liquid supply remains open. When all of the entrapped air within the shell has been bled off and after test liquid emerges, the cap must be tightened fully.

(10) For extinguishers tested with a test bonnet or fitting, the bonnet or fitting must be tightened FULLY while the water supply remains open. When all of the entrapped air within the shell has been bled off and after test liquid emerges, the vent must be closed tightly.

(11) Pressure is then applied at a rate-of-pressure rise so the test pressure is reached in not less than 30 seconds. This test pressure is maintained for at least 30 seconds. Observations are made at this time to note any distortion or leakage of the extinguisher shell.

(12) If no distortion or leakage is noted and if the test pressure has not dropped, the pressure on the extinguisher shall be released. The extinguisher is then considered to have passed the hydrostatic test.

(13) All traces of test liquid and moisture must be removed from all dry chemical, dry powder, and halogenated agent extinguishers by use of a cylinder dryer. If a heated air stream is used, the temperature within the shell must not exceed 150°F (66°C).

(14) Any extinguisher shell that fails this hydrostatic test must be destroyed by the owner or at the owner's discretion.

(c) Testing Procedures -- Hose Assemblies.

(1) The discharge nozzle must be removed from the hose assembly without removal of any hose couplings.

(2) For dry chemical and dry powder types, all traces of dry chemical or dry powder must be removed.

(3) The hose must be completely filled with test liquid before testing.

(4) Pressure then is applied at a rate-of-pressure rise to reach the test pressure within one minute. The test pressure is to be maintained for one full minute. Observations are then made to note any distortion or leakage.

~~Observations are then made to note and distortion or leakage.~~

(5) If no distortion or leakage is noted, or the test pressure has not dropped, or the couplings have not moved, the pressure is then to be released. The hose assembly is then considered to have passed the hydrostatic test.

(6) Hose assemblies passing the test shall be dried internally. If heat is used for drying, the temperature shall not exceed 150 F (60°C).

~~(d)~~ (7) Hose assemblies failing a hydrostatic test must be destroyed by the owner or at the owner's direction.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

594.5. Recording of Tests.

(a) High Pressure D.O.T. Specification Cylinders. ~~For H~~ high pressure cylinders ~~and cartridges~~ passing a hydrostatic test, the month and year shall be stamped in accordance with the requirements set forth by D.O.T.. Recording (stamping) shall be placed only on the shoulder, top head, neck, or footing (when so provided) of the cylinder.

(b) Low Pressure D.O.T. Cylinders. Extinguisher shells of low pressure D.O.T. cylinders that pass a hydrostatic test shall have the test information provided in accordance with D.O.T. requirements and recorded on a suitable metallic label or equally durable material. The label shall be affixed by a heatless process to the shell. These labels shall be self-destructive when removal from an extinguisher shell is attempted. The label shall include the following information.

(1) Month and year the test was performed, indicated by a perforation, such as by a hand punch.

(2) Test pressure used.

(3) Name, address and license number (E#) of the concern.

(4) For D.O.T. Specification cylinders, the D.O.T. Retesters Identification Number (RIN), if applicable.

(5) For D.O.T. Specification cylinders, the letter "S" if the Modified Test Method was used.

(c) Low Pressure (non-D.O.T.) Cylinders. Extinguisher shells of low-pressure non-D.O.T. cylinders that pass a hydrostatic test shall have the test information recorded on a suitable metallic label or equally durable material. The label shall be affixed by a heatless process to the shell. These labels shall be self-destructive when removal from an extinguisher shell is attempted. The label shall include the following information.

(1) Month and year the test was performed, indicated by a perforation, such as by a hand punch.

(2) Test pressure used.

(3) Name, address and license number (E#) of the concern.

(d) Hose assemblies. - Hose assemblies passing a hydrostatic test do not require recording.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

Article 8. Licensing and Certificates of Registration

595.1. Document Transfers.

(a) A license or a Certificate of Registration is not transferable except by the State Fire Marshal.

(b) The State Fire Marshal may transfer a license number upon submission of a new license application form and payment of appropriate fees.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13175, 13178, 13184, Health and Safety Code.

595.2. Expired Documents. Application for renewal of any class of license or for a Certificate of Registration which has expired shall be considered as an original application.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13166, 13167, 13179, 13180, 13189, Health and Safety Code.

595.3. Minimum Ages.

- (a) A license shall not be issued to any person under 18 years of age.
- (b) A Certificate of Registration shall not be issued to any person under 18 years of age.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

595.4. Duplicate Issuance. A duplicate license or Certificate of Registration may be issued by the State Fire Marshal. A written statement describing the reasons for the duplicate issuance shall be submitted by the licensee or registrant before duplicates will be issued. The statement shall explain fully the reason for the destruction of the license. A Fee equal to fifty percent (50%) of the original fee shall be submitted for the issuance of a duplicate certificate of registration.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13175, 13183, Health and Safety Code.

595.5. Fire Extinguisher License Types.

- (a) Types of licenses are as follows:

- (1) Type A. ~~Service, recharge, inspect, and conduct hydrostatic tests on any or all types of extinguishers;~~ A class of license to service any or all types of fire extinguishers including (2), (3), (4), (5), and (6), below.
- (2) Type B. ~~Service, recharge, or inspect all types of extinguishers except halon, dry chemical, and dry powder fire extinguishers~~ A class of license to perform maintenance and recharging of water based fire extinguishers, and external maintenance of carbon dioxide fire extinguishers.
- (3) Type C. ~~Conduct hydrostatic tests of low pressure water and water chemical fire extinguishers~~ A class of license to conduct hydrostatic tests of low pressure fire extinguisher cylinders. A fire extinguisher concerns possessing this class of license shall be a D.O.T. approved cylinder
regualification facility if D.O.T. specification cylinders are tested.
- (4) Type D. ~~Service, recharge, inspect, or conduct hydrostatic tests of low pressure dry chemical, and dry powder fire extinguishers~~ A class of license to perform maintenance and recharging of dry chemical, dry powder and external maintenance of halogenated agent fire extinguishers.
- (5) Type E. ~~A class of license to conduct hydrostatic expansion tests of high pressure fire extinguisher cylinders, and perform internal maintenance and recharging of carbon dioxide fire extinguishers. listed and marked in conformance with D.O.T. regulations.~~ A fire extinguisher concern possessing this class of license shall be a DOT approved cylinder regualification facility.
- (6) Type F. ~~Conduct hydrostatic testing, servicing and recharging of halon fire extinguishers~~ A class of license to perform internal maintenance, recharge and recover halogenated agents from portable fire extinguishers. A fire extinguisher concerns possessing this license shall have a listed Halon 1211 closed recovery system.
- (7) Type L. (Limited). A class of license, limited to public or private entities that are not engaged in the business of servicing fire extinguishers and which only maintain their own portable fire extinguishers. A Type L licensee may only perform maintenance of stored pressure dry powder and dry chemical fire extinguishers, water type and wet chemical type fire extinguishers and external annual maintenance of halogenated agent and carbon dioxide fire extinguishers.

(b) Every class of license shall be identified ~~in~~ by type as specified above according to the act or acts performed by the licensee or by any of the owner's employees. Every licensed concern shall be staffed by qualified personnel and shall be properly equipped to perform the act or acts for the type of license issued.

(c) Any licensed concern may take orders for the performance of any acts for which the concern is not classified authorized provided these orders are consigned to ~~any~~ another licensed concern licensed that is classified (based on 595.5 (d)) to perform such acts.

(d) Every licensed concern who is not authorized to perform specific acts shall have on file with the State Fire Marshal reciprocal letters of agreement to perform those specific acts from licensed concerns who are authorized. All required reciprocal letters of agreement shall be submitted to the State Fire Marshal with each original, renewal and status change application for a license. Any changes to reciprocal letters of agreement shall be reported to the State Fire Marshal within 15 days of the change.

(e) A licensee is only authorized to perform those specific acts for which a license has been granted by the State Fire Marshal. Qualifications for a licensee shall consist of having the necessary tools, equipment, service manuals, recharging agents and materials, lubricants, replacement parts and qualified experienced personnel for each specific act. Each licensed concern shall submit evidence of qualifications to the State Fire Marshal with each original, renewal and status change application for license.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13163, Health and Safety Code.

595.7. 595.6. Concern Name.

(a) In the event two applications are received by the State Fire Marshal, both of which propose the use of the same or similar concern name, priority will be given to the application bearing earliest receipt date.

(b) Once a concern license has been issued, there shall be no changes made to the concern name unless the change has been approved in advance by the State Fire Marshal.

(c) The State Fire Marshal shall verify and approve any proposed concern name as it relates to public safety and deceptive practices.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13163, 13164, 13171, 13172, Health and Safety Code.

595.8. 595.7. Post Office Boxes Business location. For purpose of licensing, post office box numbers, mail forwarding establishments, telephone answering service establishments and other such similar establishments are not acceptable as physical business locations. Licensees shall provide the State Fire Marshal with the actual physical business location from which business is conducted. This address shall match the physical address as listed on the Fire Extinguisher Concern License. Each applicant shall furnish a valid local business license from the local community that matches their physical address as listed on the "Fire Extinguisher Concern License". A licensed concern shall notify the State Fire Marshal of a change of location on a Fire Extinguisher Concern License Status/Change application form and submit a fee of \$125.00.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13163, 13164, 13169, 13170, 13172, 13174, Health and Safety Code.

595.9. 595.8. Posting of License. Every license issued according to these regulations shall be posted on the premises of the licensee's location. Licenses shall be readily available for inspection during regular business hours by the local inspection authority or by the State Fire Marshal.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13173, Health and Safety Code.

~~595.10.~~ 595.9. Certificates of Registration.

(a) Every certificate of registration shall indicate the type of act or acts to be performed as follows:

(1) Type 1 -- ~~Service~~ Recharge and maintenance of any or all types of fire extinguishers.
(2) Type 2 -- Hydrostatic test any or all low pressure non-D.O.T. specification fire extinguishers cylinders, ~~except those required to be tested by the Water Jacket Volumetric Expansion Method.~~

(3) Type 3 -- Hydrostatic test any or all ~~high pressure~~ D.O.T. marked specification fire extinguishers cylinders, ~~using Water Jacket Volumetric Expansion Method or other D.O.T. approved test method.~~

(b) Any person holding a valid certificate of registration may take orders for the performance of any act or acts for which authorization has not been granted. These orders shall be consigned to the licensed company for which they have a binding reciprocal agreement on file with the State Fire Marshal ~~any person~~ and who ~~is has~~ qualified and is authorized to perform such act or acts.

(c) A person~~s~~ holding a valid certificate of registration shall not perform any act for a fee unless the person also holds a valid license or is employed by concern possessing a valid license.

(d) Persons possessing a certificate of registration and employed by a licensed concern may perform only those acts ~~for~~ which the licensed concern is authorized to do and for which the employee is qualified. In the case of an independent contractor, franchisee, or any other arrangement in which the certificate of registration holder is an independent business concern, a valid license is required to be in the name of the independent concern.

EXCEPTION: Contractual arrangements between persons possessing a certificate of registration and a licensed concern are permitted only if the licensed concern provides the State Fire Marshal written evidence that a contractual agreement is in effect, that the contracted person is insured (as specified in section 595.13), and that the licensed concern will assume full responsibility for the actions of the contracted person with respect to these regulations.

(e) To be issued or have renewed a Certificate of Registration, an individual has to either hold a valid portable fire extinguisher company license or be employed by a company possessing a valid portable fire extinguisher company license.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, 13175, Health and Safety Code.

~~595.11.~~ 595.10. Examination Procedures.

(a) Every person who performs any act or acts within the scope of a Certificate of Registration shall pass ~~an~~ a written examination which may be supplemented by practical tests when deemed necessary on such act or acts in accordance with the provisions of this chapter.

(b) Any applicant who has failed the examination may re-apply and take another examination not less than fifteen (15) days from the date of the first examination after filing a new application and paying the required fee.

(c) Beginning on January 1, 1994, every four years at time of renewal when deemed necessary by the State Fire Marshal, applicants for renewal of certificates of registration shall successfully pass a written examination as required by Section 13177, Health and Safety Code.

(d) Any applicant failing to take an examination applied for within thirty (30) days of the date of eligibility must re-apply for the intended examination with payment of appropriate fees.

(e) Every person taking an examination for a certificate of registration has the right to contest the validity of individual questions in such examination.

(1) Upon conclusion of the examination process, the person taking the examination may request review of the test with staff of the Office of the State Fire Marshal.

(2) Any challenge as to the validity of individual questions of an examination must be made in writing within 72 hours after taking said examination. ~~Contentions~~ Challenges shall state the reason for the objection.

(3) The decision as to the action to be taken on the submitted challenge shall be by the State Fire Marshal and such decision shall be final.

(4) The action taken by the State Fire Marshal shall be reflected in all future examinations but shall not affect the grades established in any past examination.

NOTE: Authority cited: Section 13160, 13175, 13177 Health and Safety Code. Reference cited: Sections 13160, 13177, 13178, 13185, Health and Safety Code.

~~595.12~~ 595.11. Possession of Certificate of Registration. Certificates of Registration shall be carried by the person to whom it is issued whenever he or she is performing functions or services regulated by this subchapter.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13178, Health and Safety Code.

~~595.13~~ 595.12. Employer's Responsibility. ~~In addition to the requirements of Section 13174, Health and Safety Code, an employer shall also furnish the Certificate of Registration Type number of the employee. Every licensed concern shall annually, within seven days of employment and within seven days of termination of employment, report to the State Fire Marshal in writing, the name, address, and certificate of registration number and type, of every person performing any act of maintenance, recharging or hydrostatic testing of portable fire extinguishers for such licensed concern.~~

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13174, Health and Safety Code.

~~595.14~~ 595.13. Insurance.

(a) Any person, firm, or corporation applying for a license or the renewal of a license to service portable fire extinguishers shall furnish to the State Fire Marshal and maintain and keep in force at all times a current policy of public liability and property damage insurance. The policy shall provide limits of bodily injury and property damage of not less than ~~fifty thousand dollars (\$50,000.00) for one person or one hundred thousand dollars (\$100,000.00) one million dollars (\$1,000,000.00) combined single limit~~ for each occurrence annually ~~and with a limit of property damage liability of not less than twenty-five thousand dollars (\$25,000.00) for each occurrence~~ as payment for damages to persons or property which may result from or be caused by the negligent servicing of portable fire extinguishers by the licensee, his, her, or its agents, servants, employees or certificate holders performing the service.

EXCEPTION: "Persons, firms, corporations or public entities," not engaged in the business of servicing fire extinguishers for a fee, who only maintain their own portable fire extinguishers.

(b) The certificate of insurance shall provide all of the following:

(1) That the insurer will not cancel the insured's policy without fifteen days prior written notice to the State Fire Marshal; and

(2) That the insured license-holder, and all certificate holders acting as employees under the license-holder, are included as additional insureds, but only insofar as operations within the scope of the licensing requirements are covered; and

(3) That the State of California shall not be responsible for any premiums or assessments on the policy.

(c) Persons, firms, corporations or public entities not engaged in the business of servicing fire extinguishers, for a fee, who only maintain their own portable fire extinguishers shall annually provide to the State Fire Marshal a written statement that the State of California shall be held harmless from any and all actions of their employees who maintain a valid certificate of registration while performing their portable fire extinguisher activities.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13165, Health and Safety Code.

Article 9. Tagging, Marking, Labeling and Seal of Registration

596. General.

(a) Service Annual Maintenance Tags, internal maintenance tags Verification of Service Collars, and Hydrostatic Test Labels required in accordance with this subchapter shall be approved by the State Fire Marshal and shall conform with the provisions of this Article. One facsimile or printers proof showing both sides of the each tag, collar, or label shall be submitted to the State Fire Marshal for approval with each original and renewal application for license, when the licensed concern changes address or license type(s), and whenever service tags, collars, or labels are redesigned or revised. Tags, collars, or labels shall not contain false and misleading statements as determined by the State Fire Marshal. Tags, collars, or labels approved by the State Fire Marshal shall not be used for any purpose other than to reflect servicing or selling of an approved portable fire extinguisher.

~~(b) Service tags approved by the State Fire Marshal shall not be used for any purpose other than to reflect servicing or selling of an approved portable fire extinguisher.~~

(b) Annual Maintenance Tag.

(1) Each fire extinguisher that has undergone annual maintenance as required in this Chapter shall have an Annual Maintenance Tag attached in accordance with this Article.

(c) Internal Maintenance Tags.

Internal maintenance tags shall not be utilized after March 31, 2002.

Through and including March 31, 2002, internal maintenance tags shall continue to be utilized in accordance with the following procedures:

Upon completion of annual maintenance as required in Section 575.1 or the refill of any fire extinguisher, a State Fire Marshal approved self-adhesive tag conforming to Section 596.2 with the day, month and year, initials, and Certificate of Registration ("EE") number of the person who performed the service written thereon must be placed securely on the topmost exposed portion of the siphon or "pick-up" tube within the extinguisher prior to reassemble and recharging. The day, month and year and Certificate of Registration ("EE") number must correspond with the day, month and year and number appearing on the Service Tag, required by this section. The initials must be of the person whose signature appears on the Service Tag.

EXCEPTIONS:

- (1) Carbon Dioxide Portable Fire Extinguishers.
- (2) Halogenated Agent Fire Extinguishers.
- (3) External Cartridge Operated Portable Fire Extinguishers and cylinder operated wheeled units.
- (4) ~~All w~~ Water, Type and Wet chemical fire extinguishers.

(d) Verification of Service Collar.

(1) Each extinguisher that has undergone maintenance, which includes internal examination or has been recharged as required in this chapter shall have a Verification of Service Collar attached in accordance with this Article.

EXCEPTION: Cartridge/cylinder-operated fire extinguishers do not require a Verification of Service Collar.

~~(d)~~(e) Hydrostatic Test/Halon Maintenance Label.

(1) All low pressure fire extinguishers successfully passing a hydrostatic test as described in Section 594.4.(b) shall have a hydrostatic test tag label affixed in accordance with Section 594.5.(b) this Article.

~~(2) Upon completion of six year maintenance procedure described in Section 575.12.(a), halon extinguishers shall have a halon maintenance tag affixed in accordance with Sections 575.12.(b) and 596.2(e).~~

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13183, 13190.1, 13190.2, 13190.3, Health and Safety Code.

596.1. Service Tag Required Information.

(a) Service Annual Maintenance tags shall bear the following information machine printed on them:

(1) The words "Do Not Remove by Order of the State Fire Marshal" shall be placed at the top of the tag.

(2) Concern Name as listed on license.

(3) Concern ~~Address~~ Business Location in accordance with Section 595.7.

~~(5)~~ (4) License Number ("E" Number.) and License Type

~~(6)~~ (5) Service/New Extinguisher Maintenance/New Extinguisher Block.

~~(7)~~ (6) Date service performed.

~~(8)~~ (7) Certificate of Registration. Provide printed "EE" followed by space for individuals number (note format Section 596.4.)

~~(9)~~ (8) The Seal of Registration of the Office of State Fire Marshal. (See Section ~~596.13~~ 596.11).

EXCEPTION: Portable fire extinguishers serviced by persons coming within the meaning of Section 13175.1 and as excepted by Section 13190.1, Health and Safety Code.

(9) Space or line for signature of person performing or supervising the service work.

(b) The above information shall appear on one side of the service Annual Maintenance tag. All other desired printing or information except association or company logos shall be placed on the reverse side of the tag. Association and company logos if printed on the information side of the ~~label~~ tag shall be confined to the area of the tag used for the name and address of the licensee.

(c) Verification of Service Collars shall bear the following information machine printed on them:

(1) The words "Do Not Remove by Order of the State Fire Marshal."

(2) The words "Verification of Service."

(3) License Number ("E" Number).

(4) Date (month and year) maintenance performed.

(5) Certificate of Registration. Provide printed "EE" Number followed by space for individuals number (note format Section 596.4)

(6) Space for signature of person performing or supervising the service work.

(7) Concern name as listed on license.

(d) Hydrostatic Test Labels shall bear the following information machine printed on them:

- (1) Concern Name.
- (2) Concern Address.
- (3) License Number ("E" Number).
- (4) D.O.T. RIN (if applicable).
- (5) Date (month and year) test performed.
- (6) Means to record the hydrostatic test pressure used in PSI.
- (7) The letter "S" (for modified test method, if applicable).

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13183, Health and Safety Code.

596.2. Size ~~and~~ Color and Material.

(a) ~~Service tags~~ Annual Maintenance Tags shall be four and three-fourths inches (4 3/4") in length and two and three-eighths inches (2 3/8") in width with a one-fourth (1/4") deviation for each dimension permissible. ~~Service tags shall not be red in color.~~

(b) Internal maintenance tags shall not be utilized after March 31, 2002.

Through and including March 31, 2002 internal maintenance tags shall continue to be utilized in accordance with the following procedures:

Internal maintenance tags shall be not more than and not less than three inches (3") in length and one-half inch (1/2") in width, white in color with pressure sensitive permanent adhesive applied to the reverse side of the label. A company logo may be placed within a space three-quarters (3/4") of an inch from either end of the label

(c) Verification of Service collars shall be made from a single circular piece of uninterrupted material forming a hole of a size that will not permit the collar assembly to move over the neck of the container unless the valve is completely removed. The collar shall not interfere with the operation of the fire extinguisher.

(d) Hydrostatic Test ~~Halon Maintenance Tags~~ Labels shall be three inches (3") in width and two and one-fourth inches (2 1/4") in length with a one-fourth inch (1/4") deviation for each dimension permissible.

(e) Annual Maintenance Tags, Verification of Service collars and Hydrostatic Test Labels shall not be red in color.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13183, Health and Safety Code.

596.3 Attaching Tag.

(a) One ~~service tag~~ Annual Maintenance Tag shall be attached to each portable fire extinguisher in such a position as to be conveniently inspected. The annual maintenance service-tag may be attached to the extinguisher by means of wire, string, or plastic ties or by the use of a self-adhesive tag approved by the State Fire Marshal. Self-adhesive tags shall be placed in such a position as to be conveniently read but shall not be placed on the front of the extinguisher.

(b) Internal maintenance tags shall not be utilized after March 31, 2002.

Through and including March 31, 2002 internal maintenance tags shall continue to be utilized in accordance with the following procedures:

Internal maintenance tags shall be placed within the top three inch (3") portion of the siphon tube below the valve assembly. Internal maintenance tag shall be placed on siphon tube in the following manner.

- (1) Place one end of adhesive side to syphon tube.
- (2) Bring remainder of tag around tube and overlap tags.
- (3) Completed tag should be a 90⁰ angle to siphon tube with the tag overlapping itself.
- (4) Old tag shall be removed at time of new service.

(c) One Verification of Service collar shall be installed on each portable fire extinguisher as required by Section 596(d)(1) in the following manner:

(1) The Verification of Service collar shall be installed on the neck of the fire extinguisher cylinder while the valve assembly is removed for maintenance. After the valve assembly is replaced and the maintenance completed, the collar will be trapped by the valve assembly so the collar cannot be removed.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13190.1, 13190.2, 13190.3, Health and Safety Code.

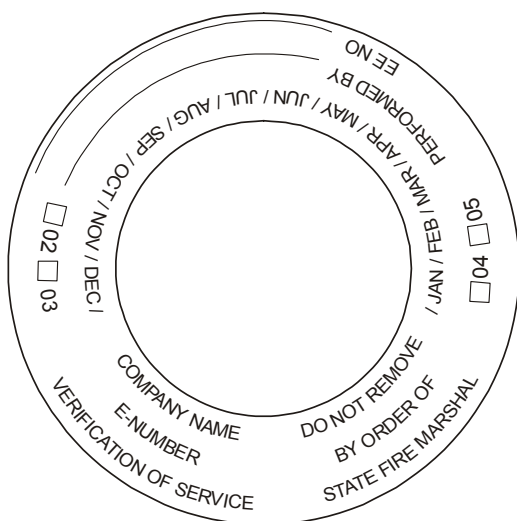
596.4. Service-Tag Format. The following format shall be used for all ~~service~~ Annual Maintenance tags, Verification of Service collars, and Hydrostatic Test labels subject to the use requirements of Section 596.1, ~~and 596.2, and 596.3~~

- (a) The maximum number of blocks identifying the year of service shall not exceed five (5).


NOTE: Dates shown on tag format are examples only.


(b) Every Annual Maintenance tag, Verification of Service collar, and Hydrostatic Test label attached to an extinguisher shall be ~~an approved service tag by the State Fire Marshal and conforming~~ conform to this Article.

EXCEPTION: Maintenance tags or Hydrostatic Test labels previously approved by the State Fire Marshal may be utilized until March 31, 2002.



VERIFICATION OF SERVICE COLLAR

DO NOT  REMOVE
BY ORDER OF
THE STATE FIRE MARSHAL

16	1	 Type _____ EE _____ (Cert. Reg. No.) _____ (Signature) Name and Address of Firm _____ _____ _____ ANNUAL MAINTENANCE PERFORMED <input type="checkbox"/> NEW EXTINGUISHER <input type="checkbox"/>	DEC	2006
17	2		NOV	
18	3		OCT	2005
19	4		SEP	
20	5		AUG	2004
21	6		JUL	
22	7		JUN	2003
23	8		MAY	
24	9		APR	2002
25	10		MAR	
26	11	FEB		
27	12	JAN		
28	13			
29	14			
30	15			
31				

ANNUAL MAINTENANCE TAG

2002			2003			2004			2005			2006		
1	2	3	4	5	6	7	8	9	10	11	12			
CONCERN NAME														
ADDRESS												RIN		
E-NUMBER														
HYDROSTATICALLY TESTED AT PSI.												<input type="checkbox"/> S- MODIFIED TEST		
1	2	3	4	5	6	7	8	9	0					
1	2	3	4	5	6	7	8	9	0					
1	2	3	4	5	6	7	8	9	0					

HYDROSTATIC TEST LABEL
D.O.T. SPECIFICATION CYLINDERS

2002			2003			2004			2005			2006		
1	2	3	4	5	6	7	8	9	10	11	12			
CONCERN NAME														
ADDRESS														
E-NUMBER														
HYDROSTATICALLY TESTED AT PSI.														
1	2	3	4	5	6	7	8	9	0					
1	2	3	4	5	6	7	8	9	0					
1	2	3	4	5	6	7	8	9	0					

HYDROSTATIC TEST LABEL
NON-D.O.T. SPECIFICATION CYLINDERS

FORMAT

Authority: Health and Safety Code Section 13160
Reference: Health and Safety Code Section 13160, 13183

596.5. Placement. ~~A service tag, conforming to this article, shall be securely attached to each portable fire extinguisher at the time of service. Self-adhesive tags shall be placed in such a position as to be conveniently read but shall not be placed on the front of the extinguisher.~~

~~EXCEPTION: Service tags attached to extinguishers serviced by persons coming within the meaning of Section 13175.1 and Section 13190.1, Health and Safety Code, shall not bear the State Fire Marshal Seal of Registration.~~

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13183, Health and Safety Code.

596.6. 596.5. Date Serviced and Signature. On the date service was performed, the date of service, ~~type of service given,~~ a legible Certificate of Registration number (EE-----) and the signature of the person performing or supervising the servicing shall be written on the ~~service tag~~ or collar in the space provided. The signature shall be as defined in Section 557.19(d) of this chapter. A rubber stamp of name is not acceptable.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13183, Health and Safety Code.

596.7. 596.6. Restrictive Use.

(a) Portable fire extinguishers permanently removed from service due to non-conformance with the requirements of this chapter shall not be tagged except as provided for in Section ~~560.5~~ 577.1(b).

(b) ~~A service tag~~ Annual Maintenance Tags, Verification of Service collars, and Hydrostatic Test labels or hydrostatic test / halon maintenance tag required by this Article shall not be attached to any portable fire extinguisher unless such service has actually been performed or supervised by the person affixing such tag.

(c) ~~A service tag~~ The Annual Maintenance Tag as described in Section 596.1(a) bearing the seal of the State Fire Marshal shall not be attached in any manner to any device or system which is not a portable fire extinguisher.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13185, Health and Safety Code.

596.8. 596.7. Removal of Tags.

(a) No person shall remove ~~a service~~ any tag, collar or label required by this Article from a portable fire extinguisher except when service is performed.

(b) No person shall deface, modify, or alter any ~~service tag collar or label attached to or~~ required by this Article to be attached to any portable fire extinguisher.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13185, Health and Safety Code.

596.9. 596.8. Listed Labels. Attached to Extinguishers

(a) Every portable fire extinguisher shall bear a listed label in accordance with the standards listed in Section 561.2.

(b) The location of Portable Fire Extinguisher labels shall conform to Section 561.2.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, 13177, Health and Safety Code.

596.10. 596.9 Unlawful Use of Listed Label.

(a) Listed labels bearing the rated classification shall not be placed upon any fire extinguisher unless specifically authorized by an agency approved and qualified to perform tests as prescribed in this chapter.

(b) Any label bearing the rated classification of an extinguisher shall not be permanently removed from such extinguisher.

(c) A fire extinguisher which does not bear a label but was in fact previously labeled pursuant to these regulations may be serviced, provided that substantiating evidence of such previous labeling can be documented. "Evidence" shall mean a copy of a bill of lading, sales receipt or other documents specifying purchase details, or other conclusive data attesting to the approval of the fire extinguisher.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, 13177, Health and Safety Code.

596.11. Hydrostatic Test Recording / Halon Maintenance Tag Format.

(a) ~~Hydrostatic test / halon maintenance tag label format shall conform to the design as illustrated below subject to the requirements of Sections 575.12.(b) 576.1.(b), 594.5.(b) and 596.2.(c).~~

~~(b) The maximum number of blocks identifying the year of service shall not exceed five (5).~~

~~(c) Every tag attached to an extinguisher shall be an approved tag conforming to the Article.~~

Authority: _____ Health and Safety Code Section 13160

Reference: _____ Health and Safety Code Sections 13160, 13183

~~596.12.~~ 596.10 Marking of Fire Extinguishers.

(a) No fire extinguisher shall have markings stamped, engraved, or otherwise marked on the shell except:

(1) Extinguishers marked at time of manufacture by the manufacturer in a manner found acceptable to an approved testing agency.

(2) High Pressure Cylinders.

(b) Engraving on the skirt, valve, handle or control lever with a engraving pencil is permitted.

(c) Existing aluminum shell extinguishers and existing mild steel extinguishers having engraving on the shell, shall be permitted to remain in service under the following conditions:

(1) Aluminum shell extinguisher is hydrostatically tested biannually to ensure their structural integrity.

(d) Existing fire extinguishers of copper, brass or other similar wall construction which have been engraved on the extinguisher shell with other than a electric engraving pencil or which have been stamped on the shell in any manner shall be removed from service and discarded in accordance with Section ~~560.5~~ 577.1.

(e) All future engraving permitted on any extinguisher shall be performed with an electric engraving pencil.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13162, 13177, Health and Safety Code.

~~596.13.~~ 596.11 Seal of Registration.

(a) The official Seal of Registration of the State Fire Marshal shall consist of a series of concentric circles lettered as follows:

Outer Circle

Upper Half: "Registered"

Lower half: "Fire Extinguisher"

Inner Circle

Upper half: "State of California"

Lower half: "State Fire Marshal"

In the center shall appear five crossed trumpets.

Appended above the outer circle and in a central position shall be a box provided for displaying type of license issued.

Appended below the outer circle and in a central position shall be a box provided for displaying the license number assigned to the concern by the State Fire Marshal.

(c) Every reproduction of the Seal of Registration and every letter and number placed thereon, shall be no smaller than 8 point size to render such seal, letter, and number distinct and clearly legible.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Sections 13160, 13165, 13178, 13183, Health and Safety Code.

~~596.14.~~ 596.12 Permissive Use. Licensed concerns shall use the Seal of Registration on every ~~service tag~~ Annual Maintenance Tag required by this ~~subchapter~~ and may use such seal for any of the following purposes:

(1) Labels for containers of approved portable fire extinguishers.

(2) Labels for portable fire extinguishers not otherwise prohibited by this chapter.

- (3) Printed matter including advertising matter and copy for publication.
- (4) Letterhead, personal cards and similar stationery.
- (5) Stencils for any of the above.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~596.15.~~ 596.13 Unlawful Use. No person or concern shall produce, reproduce, or use this seal in any manner or for any purpose except as provided in this article.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.

~~596.16.~~ 596.14 Cease Use Order. No person or concern shall continue the use of the Seal of Registration in any manner or for any purpose after receipt of a cease and desist notice in writing from the State Fire Marshal or upon the suspension or revocation of the concern's license.

NOTE: Authority cited: Section 13160, Health and Safety Code. Reference cited: Section 13160, Health and Safety Code.